

ANNUAL REVIEW NUMBER

TEXTILE BULLETIN

Vol. 51

FEBRUARY 11, 1937

No. 24

CLINTON COMPANY
CLINTON, IOWA

CLINTON
STARCHES

FOR ALL TEXTILE PURPOSES

QUALITY

SERVICE



STARCH PLANT



MAIN PLANT

You *asked* for it...

PURE WHITE



Summitlube is colorless—won't stain or discolor. Ask us for a sample for examination.

MILL operators have wanted a white lubricant like this, for years.

It must be stainless . . . easy to wash out . . . stable . . . possess high lubricating value.

They now have it—Texaco Summitlube.

Summitlube has met with universal success for lubricating various types of textile machinery where discoloration can spoil goods or necessitate extra processing to remove it.

Used as a twister or spinning ring lubricant,

the high lubricating value of Summitlube assures you of less drag—fewer ends down. Increases life of ring travelers.

A Texaco representative will be glad to provide practical engineering service to prove the economy of Texaco Summitlube.

☆ ☆ ☆

THE TEXAS COMPANY
135 East 42nd St., New York City
*Nation-wide distribution facilities
assure prompt delivery*

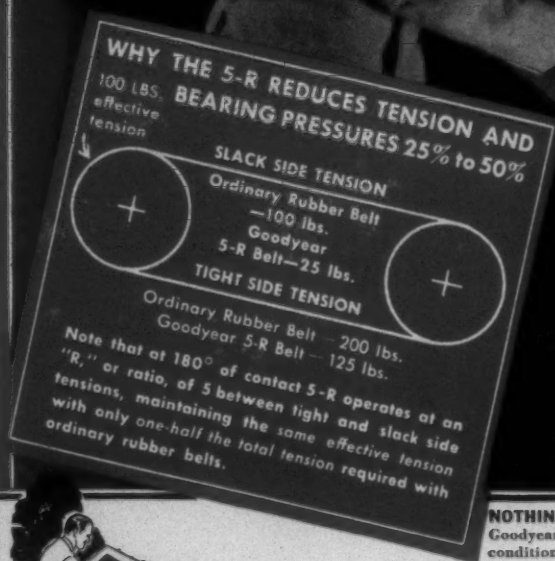


New **TEXACO** Summitlube

PUBLISHED EVERY THURSDAY BY CLARK PUBLISHING COMPANY, 118 WEST FOURTH STREET, CHARLOTTE, N. C. SUBSCRIPTION \$2.00 PER YEAR IN ADVANCE. ENTERED AS SECOND CLASS MAIL MATTER MARCH 2, 1911, AT POSTOFFICE, CHARLOTTE, N. C., UNDER ACT OF CONGRESS, MARCH 2, 1897.

YOU WON'T BELIEVE US

UNTIL YOU USE THIS AMAZING NEW 5-BELT!



NOTHING STOPS IT—Goodyear engineer "snowing" fine baby talcum powder on pulley side of Goodyear 5-R Belt in test on 100 h. p. dynamometer. Yet even under this abnormally slippery condition 5-R continued to pull a heavy load at slack tension—proof of its remarkable grip!



YOU are bound to be skeptical—for any description of the new Goodyear 5-R Belt's astounding slack-tension operation sounds too good to be true. Yet every one of the following facts has been proved by nearly two years' test service on hundreds of different industrial applications:

HIGHEST COEFFICIENT OF FRICTION—the 5-R is treated with a new Goodyear-perfected non-rosinous rubber compound, completely impregnated THROUGH the fabric, that affords a tenacious pulley-grip unsurpassed by any other type of belt!

PERMANENT FACE ADHESION—a high ratio of tensions may be obtained temporarily by recourse to one of many impermanent surface compounds. 5-R is unique in that it offers a minimum ratio of tensions of 5 at 180° of contact—its surface friction is lasting. It is a compound that will not crumble, ball-up, chatter or slip.

OPERATES AT 25% TO 50% LOWER TENSION—because of

its high coefficient of friction, 5-R pulls heaviest loads at surprisingly slack tensions; greatly lessening strain on both belt and fasteners, and greatly increasing belt life.

REDUCES BEARING PRESSURES 25% TO 50%—because of lower operating tension, 5-R increases bearing life, lessens lubrication problems, lowers frictional losses and cuts power costs.

APPLICABLE TO ANY DRIVE—5-R is a square-edged flat belt, made in roll lots in all sizes and widths; easily applied with any standard fastener.

Let the  show you

The G.T.M.—Goodyear Technical Man—will gladly explain 5-R's unequalled efficiency and economy. To bring this friendly consultant to your plant, write Goodyear, Akron, O., or Los Angeles, Calif.—or the nearest Goodyear Mechanical Rubber Goods Distributor.

**BELTS
MOLDED GOODS
HOSE
PACKING**

Made by the makers of
Goodyear Tires

THE GREATEST NAME IN RUBBER

GOOD YEAR



FOR EVERY HOUR OF THE DAY . . . ENKA RAYON



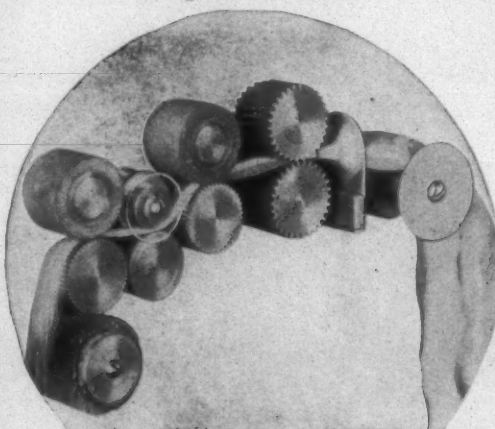
So versatile are Enka Rayon yarns, that they are successfully used for a great variety of fabrics finding their way into everything from glamorous evening gowns, smart afternoon dresses, sports clothes, to underwear and lovely lingerie. • Wanenka, outstanding sheer woven of Enka Rayon and silk by Wahnetah makes this charming jacket ...while Kayser uses Enka for their Kayser Lynes, soft shimmering satin striped tricot knit undies.



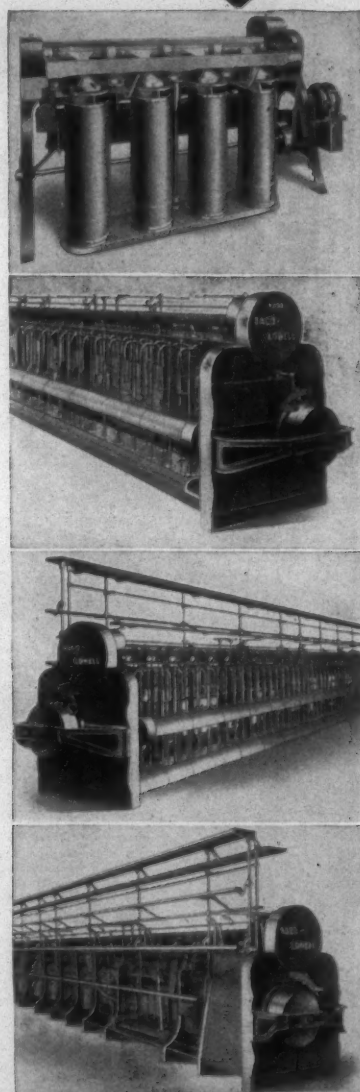
AMERICAN ENKA CORPORATION • 271 CHURCH STREET,
NEW YORK • PROVIDENCE, R. I. • GREENSBORO, N. C.

3 instead of 5

Two Roving Frame Operations *Eliminated* in this Modern Card Room Organization



Phantom view of Saco-Lowell
Control Draft Roving Assembly.



The Saco-Lowell Controlled Draft Roving Process eliminates useless and costly steps in Roving Production. From drawing sliver to spinning creel in a single process is now a practical everyday accomplishment in modern mills using this "Short Cut to Profits."

Investigate These Advantages!

1 SUBSTANTIAL SAVINGS

- a. In power and labor
- b. In capital investment
- c. In working capital
 - 1. Generally less stock in process
 - 2. Reduced operating expenses

2 LESS EQUIPMENT REQUIRED

- a. Drafts sometimes as high as 50
- b. Unnecessary handling and working of the stock eliminated.

3 QUALITY IS SUSTAINED

- a. Roving as smooth and even as that made with multi-frame processes.
- b. Yarns from this roving generally have as high a break factor and less variation than that made from ordinary roving.

MODERNIZE to Economize

SACO-LOWELL SHOPS . . . 147 MILK STREET . . . BOSTON, MASS.



FOR EVERY HOUR OF THE DAY . . . ENKA RAYON

THE
FATE
OF A
FASHION
HANGS
ON A
THREAD

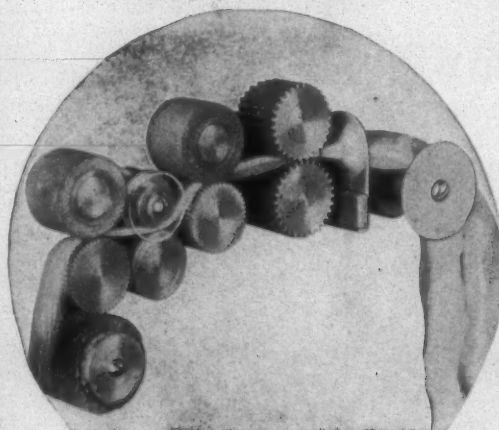
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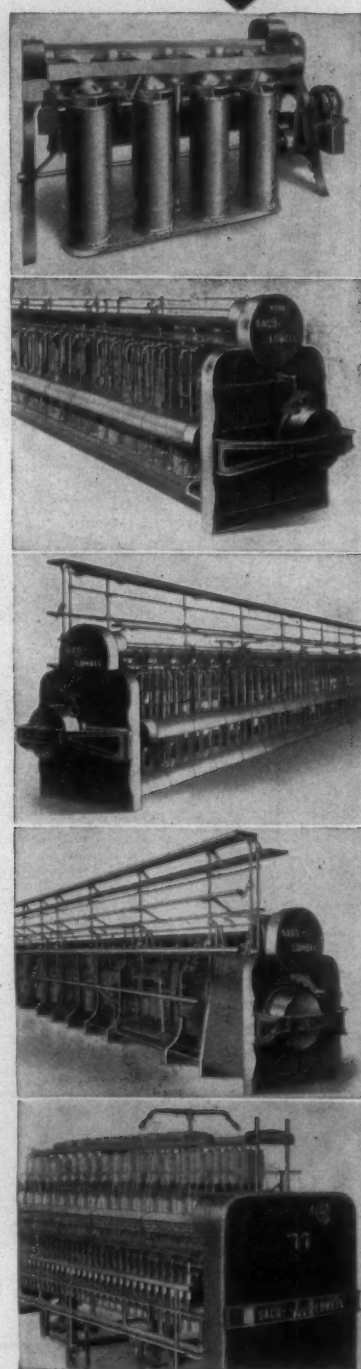
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SACO-LOWELL SHOPS . . . 147 MILK STREET . . . BOSTON, MASS.

CHAMBRAY, DENIM, AND
COLORED GOODS MILLS NOW HAVE

**MORE THAN
500,000
ACTIVE SPINDLES
ON ARMSTRONG'S CORK COTS**

PROOF of the outstanding advantages of Armstrong's Seamless Cork Cots in spinning any kind of yarn is this: today more than twenty-five per cent of all active spindles in the industry are on these cots.

Chambray, denim, and colored goods mills are a good example. In this one classification, 553,178 active spindles are equipped with Armstrong's Cork Cots.

Although as economical to buy as any other material, these cots offer far greater savings—in low assembling cost with no waste, fewer roll changes, longer life—stronger, more uniform yarn. In many mills, Armstrong's Seamless Cork Cots have cut roll covering costs 50% and more!

An Armstrong representative will be glad to show you the benefits these cots offer in spinning *your* type of yarn. For full information call the nearest Armstrong office or write direct to Armstrong Cork Products Company, Textile Division, 921 Arch Street, Lancaster, Pennsylvania.

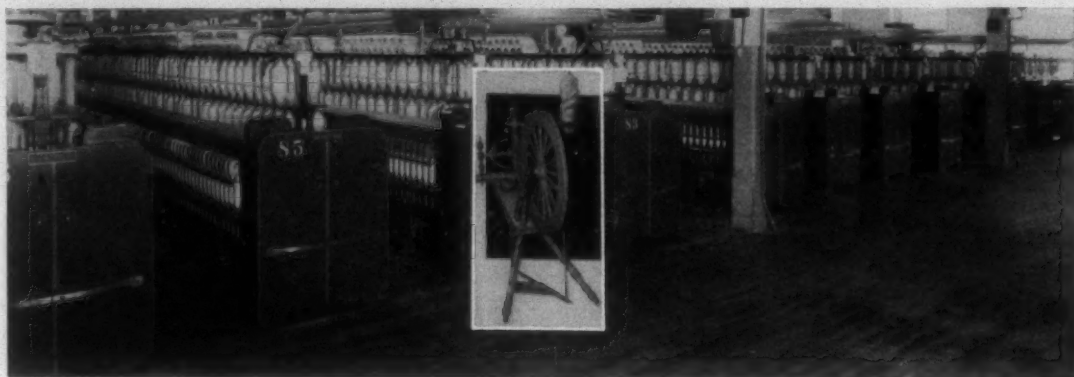


FOR SPINNING AND CARDROOM ROLLS

ARMSTRONG'S EXTRA CUSHION SEAMLESS CORK COTS



ARMSTRONG HAS MADE CORK PRODUCTS SINCE 1860



Advantages and Economy of Modern Machines and Methods

IF all of the modernization articles and editorials written in recent years could be compiled into one volume, its size, by comparison, would make an unabridged dictionary resemble a vest pocket data book. And yet Modernization is a subject that will never become threadbare or uninteresting, because ingenuity and research are constantly bringing forth new and better equipment and methods for doing every job.

Certainly, no subject before the textile industry outranks this one in importance at this particular time, when every possible dollar must be saved on production to offset the added costs resulting from the shorter work week, new Federal and State legislation, and other recent developments.

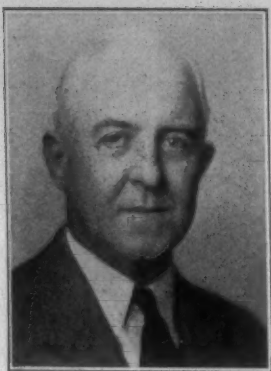
During the past year, the Southern textile industry engaged in the most extensive rehabilitation program since 1928. Increased resources, a revival of faith in the future of the industry and a growing realization that the replacement of obsolete equipment is absolutely essential before a manufacturer can, under present-day conditions, hope to operate on a consistently profitable basis, were the influences which started the 1936 modernization ball rolling.

The South won supremacy in textile manufacturing largely because Southern mill officials and

operating executives were free from the hampering traditions and methods of other sections; and because they eagerly investigated every worthwhile improvement in equipment and manufacturing processes. Their open-mindedness and quickness to adopt new and better ways of doing a job, still characterize the manufacturers of this section, and now that the business outlook is bright and funds are available, it is safe to predict that the modernization program begun last year will continue through 1937.

To show profits today, the manufacturer must give himself every possible advantage in the way of low costs. If he is operating equipment that adds to his cost, he is penalizing his possibilities for profit. This applies not only to major machines but also to the more insignificant items used in the mill. And high costs, in the end, accomplish the same thing as low prices, namely, a reduced margin of profit.

In our opinion, the articles in this issue dealing with the improvements that have been made in textile mill equipment and methods, and pointing out the resultant savings, are unusually excellent. It is hoped that our readers will find herein much information which will be helpful in their consideration of this vital subject.



TENDENCIES

By W. M. McLaurine

Secretary American Cotton Manufacturers Association

OPINIONS are often discounted as they are regarded as statements without proofs or substantiating facts.

This article is decorated with facts that seem to point to rather definite conclusions. We shall produce the facts for your consideration in thinking of the cotton farmer, the cotton manufacturer and the migration of the textile industry.

Cotton Production in U. S.

	Bales
1931-32	16,877,000
1932-33	12,961,000
1933-34	12,712,000
1934-35	9,576,000
1935-36	10,495,000

Cotton Production Foreign Growth

	Bales
1931-32	9,587,000
1932-33	10,652,000
1933-34	13,399,000
1934-35	13,297,000
1935-36	15,767,000

Consumption of Cotton U. S.

	Bales
1931-32	4,744,000
1932-33	6,004,000
1933-34	5,553,000
1934-35	5,241,000
1935-36	6,221,000
Consumption 1926-27	6,880,000

Consumption Cotton Outside U. S.

	American Bales	Foreign Bales	All Cotton Bales
1932-33	8,381,000	10,132,000	18,513,000
1933-34	8,227,000	11,669,000	19,896,000
1934-35	5,695,000	13,999,000	19,694,000
1935-36	6,318,000	15,060,000	21,378,000

The above table shows that consumption of American cotton outside of the United States has decreased from 8,381,000 bales in 1932-33 to 6,318,000 bales in 1935-36.

It also shows that consumption of foreign grown cotton has increased from 10,132,000 bales in 1932-33 to 15,060,000 bales in 1935-36.

Cotton Exports From U. S. to Japan, China and India

Year	Japan Bales	China Bales	India Bales
1931-32	2,312,000	1,115,000	224,000
1932-33	1,733,000	308,000	57,000
1933-34	1,856,000	389,000	17,000
1934-35	1,537,000	112,000	40,000
1935-36	1,518,000	47,000	8,000

These figures show a decline of the use of American cotton in the Orient from 3,651,000 bales in 1931-32 to 1,573,000 bales in 1935-36. This represents a decline of 57 per cent.

They also show a decline of the use of American cotton in India from 224,000 bales in 1931-32 to 8,000 bales in 1935-36. This represents a decline of approximately 96 per cent.

It is true that American cotton may go into India indirectly but the records show only 8,000 bales entering direct.

WORLD SPINDLES

A study of cotton spinning spindles of the world shows that they have decreased from 162,275,000 spindles in 1931 to 151,698,000 spindles in 1936, and that this decrease is more than offset by the decrease in spindles in the United States and Great Britain.

	Spindles
In 1924, in the U. S. there were	37,804,048
In 1936, in the U. S. there were	27,700,194
Of these there were active in December	24,090,204

SPINDLES IN ORIENT IN 1936

China	5,010,000
Japan	10,867,000
India	9,705,000
Total	25,582,000

The Orient in a little more than 25 years has increased its spindleage from 6,769,000 spindles to 25,582,000 spindles, or 278 per cent, while the United States has decreased its spindleage 26.7 per cent.

To state it another way, while the spindleage in place

(Continued on Page 75)





Maximum Packages Cut Costs and Improve Quality

By P. B. Parks, Jr.

ANY era of textile prosperity always has its attendant era of new machinery purchases. The explanation for this lies in the repeated postponements of machinery purchases necessitated by either the shortage of capital or by the natural caution of mill officials during the depressions which usually precede booms.

Anyone who has even an elementary knowledge of textile processes is aware of the saving in labor cost and the improvement in the quality of the product which may be expected to accrue from the use of new machinery. Larger packages, higher speeds, mechanical refinements—all combine to make new machinery profitable.

Larger packages are of prime importance because of the resultant decreased necessity for handling, which cuts labor costs; and the reduction in number of piecings, which improves the quality of the goods produced.

The above mentioned facts are not difficult to grasp. All of the arguments are valid and are generally admitted. However, one phase of the "Larger Package" problem is frequently neglected and herein lies the excuse for this article.

Many of our mills are not getting the maximum possible on their existing equipment. Whether our machinery is new or old, the package problem is one that is worthy of serious thought.

It is true that we are less likely to overlook possibilities in new machinery than in old because we have probably just passed through a period during which we have gone to considerable lengths to study the relative advantages of different makes and sizes of machinery. We have come into contact with machinery manufacturers' agents who have informed us as to what other people are doing on the same class of work and as to what they guarantee their particular equipment to do. Perhaps we have even gone to other mills to look at their latest machinery. All of these contacts have made us "package conscious."

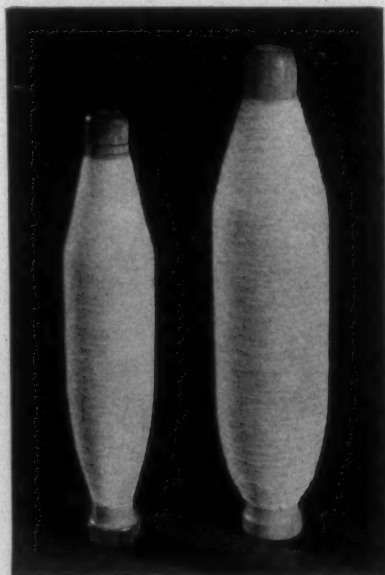
No such advantages as these are present for the average mill which has only old equipment. Consequently, old installments of machinery are more likely to be making under-maximum sized packages.

It is not difficult to understand how deficiencies in this respect come about and are perpetuated. It is only human to get into a rut and stay in it unless something happens to startle us out of it. Goodness knows, it has been so long since some of our mills have heard of anything new that a satisfied complacency is not surprising.

While this article is not intended to be a detailed exposition of either package ills or their remedies, it might be helpful to demonstrate the importance of package loss with two or three illustrations which I am sure most of us have experienced. Space does not permit more than a hint as to possible cures for the losses.

Of course it isn't polite to criticize a mill when we are visiting it, but certainly we are all guilty of getting a little satisfaction out of catching the other fellow below par. Let's take the liberty of visiting an imaginary plant just for the avowed purpose of finding some inefficiency.

Aha, Success! The very first thing we see is a card can of sliver. The sliver is standing up over the top of the can like a jack-in-the-box, but just look at the room left between the walls of the can and the sliver coil; and observe that big hole down the center of the coil. Surely there can't be more than eight or nine pounds net cotton in the can.



Courtesy Whitin Machine Works

Well, well—maybe the overseer and superintendent have gotten so accustomed to seeing this waste space in all their cans that it just doesn't bother them any more. Or again, perhaps they haven't thought about the compensating change gear on the card which can be used to get a greater diameter coil through giving the sliver more centrifugal force as it leaves the coiler head. Or they might even have grown so careless as to allow warped cans and out-of-level can tables to rob them of full-can efficiency. They are bound to know

that proper humidity, correctly bored trumpets and unworn calender rolls contribute to heavier net weight cans.

Now, let's look at *your* mill. If you have twelve-inch drawing cans and are getting only nine or ten pounds of sliver in them, you would do well to adopt an inquisitive

(Continued on Page 67)



An Unusual Modernization Program

THE STORY OF ROCKY MOUNT MILLS

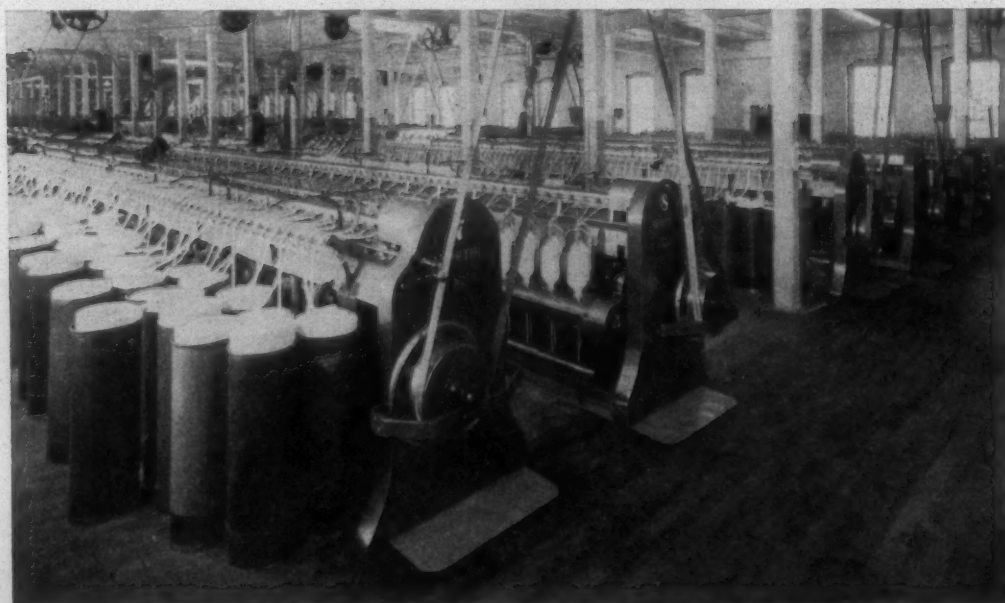
(From The Whitin Review)

DURING the past several years, following a debacle of stagnant markets, production at less than the cost of manufacturing, diminishing capital reserves, and a dread uncertainty regarding the future of cotton textiles, it has taken a high degree of courage on the part of mill managements to proceed with any elaborate plans for revampment. A great many mills have permitted plants to continue to operate with equipment installed in days of bright prosperity and adequate returns, with a minimum of expenditure for machinery and upkeep. Others, more progressive and courageous, looking ahead to better times, and with a firm conviction that the country, and the textile industry in particular, was certain to recover its footing, have formulated and carried out definite policies which included the replacement of

worn out or obsolete plant, the substitution of newer and more economical processes, and a better, and more economical arrangement of their machinery.

Today, while it may not be so unusual for a mill to determine to modernize its plant in certain respects, in the case of Rocky Mount Mills, there were a number of unusual features involved that make their story an especially interesting one.

Rocky Mount Mills has enjoyed the reputation of being the oldest cotton mill operating in the State of North Carolina, having been established in the year 1818. For five successive generations, the management of this mill has remained in one family. Each generation has resolutely kept pace with improvements in manufacturing, in marketing, and in plant equipment. A high rep-



Nine 10" x 5" Slubbers were converted to Whitin-Casablancas Long Draft

utation for yarns of quality has been sustained for one hundred and eighteen years.

So it was somewhat unusual to approach a mill of this type, making single roving spun yarns, with the recommendation that they apply long draft equipment on certain of their machines, and to change their processes to include double roving in the spinning creels, so that they might get everything possible out of their cotton staple, and make the quality of their yarns still higher. Nevertheless, that is the story behind the Rocky Mount Mills revampment.

After the management decided to overhaul their plant, no time was lost in replacing all of the machinery about which there was any question as to efficiency or condition. Indeed, some of the machines in place which were bought as recently as 1928, and had been operated but seven years, mostly on single shift, were discarded for more productive units.

A brief resumé of the changes made by Rocky Mount Mills in various departments, with some of the more outstanding results, will enable the reader to visualize the extent of the plans that were carried through. The program was completed in a remarkably short period of time, and with as little disorganization in production as possible.

OPENING, CLEANING AND PICKING

This mill possessed an up-to-date unit for opening and cleaning, capable of even blending for every mix, with a uniform color and staple throughout, and thorough cleaning. Therefore it was not necessary to make any replacements in this department. Their single beater, three process pickers, which were practically new, however, were converted into modern one-process type machines, which produce more even laps, and which have brought about some economies in operation.

THE CARD ROOM

The flat cards were ample in number, running at fair production and reasonable speeds, but the arrangement

was not the best possible. So some money and effort were spent to rearrange these and space them properly for best working conditions and the prevention of bad work. While this was being done, vacuum strippers of the newest type were applied to the cards.

The two-process drawing was considered to be in good shape, and there were sufficient deliveries to handle the card production. In the interest of simplified operation, economy and good room appearance, this drawing was rearranged.

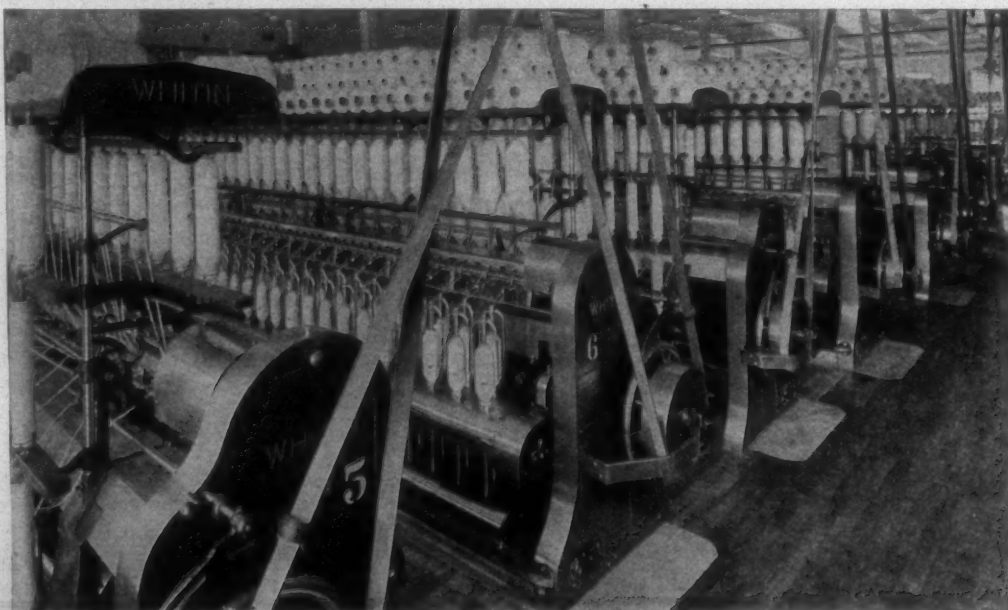
With twelve new 10" x 5" slubbers in place at the commencement of the operation, nine of these were selected for conversion to long draft, and these continue to make roving for the coarser range of counts, with double roving in the spinning creels. The remaining three machines were discarded and replaced by new 12" x 6" slubbers, which deliver a larger package to the succeeding process. The net change in slubber spindles is an increase of one per cent, with marked improvement in the quality of work, and some operating economies.

Most of the roving in the finisher process consisted of nearly new 7" x 3½" frames; but the mill determined that this size frame would deliver packages that were too small to supply the creels in their new spinning frames. As a result, twenty-two 7" x 3½" roving frames built in 1928 were junked. They were replaced with 9" x 4½" Whitin-Casablanca long draft roving frames, and long draft was applied also to a few of their 8" x 4" frames. There is a reduction of 37 per cent in the fine roving spindles. With the larger packages of roving, it naturally follows that there is less piecing of ends in the spinning creels, and consequently better roving, with the advantage of material savings in operating costs.

THE SPINNING ROOM

In this mill were a certain number of wide gauge, tape driven spinning frames on which the management felt

(Continued on Page 76)



Roving in the finisher process was changed over to Whitin-Casablanca Long Draft

Textile Merchandising Methods Have Been Modernized

By Prince M. Carlisle

THE sharp impetus which improved business has given to modernization of Southern cotton mills has not left their selling agencies in Worth Street lagging behind, and in fact, there have been a number of significant changes in merchandising methods which might well be considered a correlative trend in modernization which is closely tied in with the improvements in the mills.

Closely allied with this movement has been a broader realization of the potentialities that lie in scientific promotion of individual fabrics, and wherever mills make distinctive products, they are now presenting them not only to the primary markets but to the public generally under brand names which carry a connotation of superiority. Thus denims are actively being promoted under a number of brand names, and this advertising effort has been so successful that fashion arbiters are falling in line. Perhaps the furthest possibility that had been in the minds of denim producers a year or more ago was the use of denims in high style women's sport clothing, but there has been a distinct movement in exactly that direction in recent months.

Meanwhile, those mill executives who come to New York find the trend to modernization of physical facilities of selling constantly in progress. The past year has found a number of new store-fronts installed and even more instances of improved interior quarters. Introduction of new scientific lighting systems has been an important development in that it provides opportunity for buyers to examine samples under adequate lighting.

It may be a heresy to some mill executives to make the statement that there is virtually nothing wrong with the merchandising of cotton fabrics, but it is nevertheless true. This writer for some five years now has been hearing intermittently the statement in all seriousness that "What this market needs is better merchandising." The statement was made for so long that it came to be accepted, like the "good five-cent cigar" that the late Tom Marshall was so fond of looking upon as his country's greatest need.

Actually, cotton goods are merchandised more efficiently and more effectively than many other products of industry which are considered possessors of the greatest success.

The Worth Street rules adopted in 1935 have now been in operation smoothly for long enough to make the customers of mills consider the advisability of adoption of similar procedure in the merchandising of finished goods. Important as this development was, however, it represents a relatively minor phase of the broader business of selling cotton goods.

There are few other markets where so large a backlog of unfilled orders as cotton mills now have on their books could be built with perfect confidence that whatever the direction of prices may be, the goods will be taken in. Cancellations of cotton goods orders are so rare that the word is seldom heard in Worth Street.

More convincing than thousands of words might be in the consideration of whether cotton cloths now are being merchandised efficiently is the position that the industry in general now enjoys. Give all the credit you like to improved business conditions, and you must still admit that the merchants have done a remarkably fine job in handling a market development unprecedented in recent years.

Print cloths, for example, now are and for some time have been selling on a scale of prices which puts spots at a very sharp premium over later deliveries, with prices scaled down by easy stages to the distant shipments. This is more than a mere reflection of the statistical position of the mills on the various deliveries involved: it is a valuable insurance of market stability, which works in something like the following manner:

Any buyer of goods using appreciable quantities now has on order individual constructions at various prices which show an average considerably under the present spot market. This permits the buyer to sell the finished goods at prices which do not reflect the full spot gray cloth basis, and still make money. So long as this condition exists, there is little danger of that buyer's strike which always heretofore has been considered a serious threat to market stability whenever there has been a sustained advancing price trend.

The point is made by some observers that this system gives a fictitious picture of how much money the mills are making. Actually, of course, nobody knows how much mills are making, for no two mills have exactly the same costs. It is true,

(Continued on Page 68)



Courtesy Onyx Oil & Chemical Co.

GETTING THE MOST FROM WINDING

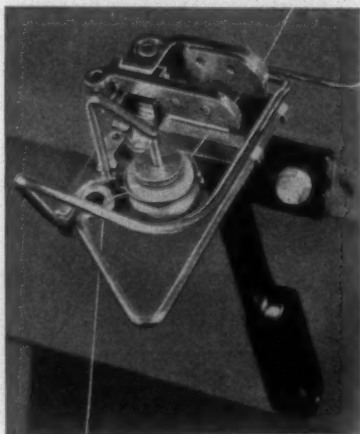


Information about winding designed to show improvements in winding equipment and new ideas in the winding operation.

HOW TO WIND FLAT BOBBINS on the NUMBER 90 MACHINE

The increasing use of flat bobbins for silk and rayon is an important development in weaving. In addition to the savings in the weave room there is a tremendous saving in the cost of winding because of the reduction in the number of bobbins handled by the winding operator. From the experience of those mills already winding flat bobbins on the No. 90 Winder, we recommend the following:

- (1) The Bobbin Support attachment, shown in the il-



lustration, does away with the winding spindle, drives the bobbin from the base end and supports it on the tip end. The only other change is in the size of the traverse wheel to control the width of the full bobbin. A special driver is used for the base end of the bobbin and a rubber contact for the tip end.

- (2) Some mills have experimented with a short spindle for the type of flat bobbin that has a hole going at least half-way through the center. A long bobbin will not run true when winding at the outer end, and the bobbin will be slightly tapered. The Bobbin Support attachment, holding the bobbin rigidly, will prevent the taper and will build a bobbin having, by actual comparison, about 25% more material than the same bobbin wound on a short spindle.

NEW DOUBLE SLUB CATCHER for soft twist yarns for knitting and dyeing packages (for Roto-Coner)

The illustration shows the new bracket made of rust-proof and non-corrosive metal, with threading bail of stainless steel. The replaceable anvils are designed for long wear and accuracy.

This new bracket permits use of both needle-type (McCall) and blade-type slub catchers. The standard bracket, as shown, has the McCall guide in the front position, so that any lint which may accumulate and drop off the needles will be caught by the blade-type and prevented from getting into the package.

There is one tamper-proof adjustment for quick setting of both slub catchers, and the McCall slub catcher can be set independently. The McCall guide has a flexible pivot point for easy cleaning, and can be swung out of the way or removed when winding ply yarn.

These Bulletins Will Help You

"Get the Most from Winding"

- No. 50 *Leesona Winder for Silk and Rayon*
- No. 50 *Leesona Winder for Sales Yarn (all fibres)*
- No. 90 *Leesona Winder for Filling Bobbins*
(Bulletin 101)

The Roto-Coner (open-wind cones, tubes and dyeing packages).

Write nearest office for any of these bulletins

UNIVERSAL

THERE'S A UNIVERSAL WINDER FOR EVERY TEXTILE NEED

WINDING COMPANY

BOSTON

PROVIDENCE
SPRINGFIELD

NEW YORK
CHARLOTTE

UTICA
ATLANTA

The Value Of Scientific Research To Textile Manufacturing

By Charles H. Clark

Secretary, U. S. Institute for Textile Research, Inc.

THIS is a scientific era in the textile industry. The industry has been the beneficiary of science, and a steadily expanding user of the products of science and of scientific research for more than a quarter of a century. Manufacturers of cotton, wool, silk and the other natural fibres, however, have been rather slow in visualizing the advantage to them of scientific testing, and analysis, control and research. Gradually the example of the dye, chemical and synthetic fibre manufacturer encouraged and forced increasing use of scientific methods in the utilization of their products, have both encouraged and forced increasing use of scientific methods by the industry; and not only by textile manufacturers, but by the manufacturers of their machinery and supplies.

Eventually, the present scientific era will prove to have been a transition period from try-and-reject, or empirical, methods to general and permanent acceptance of scientific methods. And the industry which demands the products of science, and insists upon processing of scientific character, will also demand scientific research to provide additional scientific knowledge.

SCIENCE THE TECHNICIAN'S HELPMATE

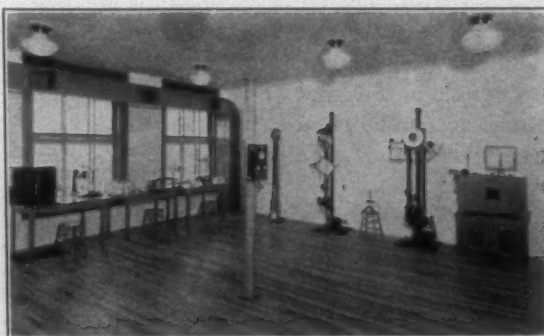
But because the industry is in a scientific era and is steadily progressing toward a permanent scientific basis, is no valid reason for skilled technicians of practical training to become alarmed; particularly if they are engaged in the natural fibre branches of the industry. Basically our cotton preparatory, spinning and weaving machinery and its operation are not radically different from those of a century ago. Hundreds of inventors and thousands of skilled technicians have combined during the intervening period to bring them to a high state of perfection. By scientific methods they should have attained their present status more quickly, but thus far science has been able to show few revolutionary improvements in textile machinery that are basic. Its important contributions to the machinery and processes employed in the manufacture of natural fibres have been mainly refinements of machine design and construction, and scientific control of pro-

cessing which has cut costs and improved the quality of products. Science is the helpmate of the skilled technician, and for most satisfactory results intelligent and hearty co-operation of both is essential.

It is true that the time is approaching when manufacturing executives and department heads in cotton, wool and silk mills must be as well grounded in the essential basic sciences as are those similarly employed in synthetic fibre manufacture, or those responsible for chemical processing in textile plants. When that time arrives a well equipped and staffed control, analytical and testing laboratory will be regarded by the mill management as essential as any other modern equipment. Scientific research, or investigation, and development work will be a routine job of the laboratory, but not basic research, excepting possibly in the largest mill organizations. Basic research conducted merely for the purpose of developing new knowledge, which may, or may not, have practical application, is a job for universities and co-operative research organizations which are not obliged to measure results by their cost and the time involved.

TWO IMPORTANT PRODUCTS OF RESEARCH

The dye, chemical and synthetic fibre industries, which are mainly responsible for stimulating the development of the scientific era in textiles, have been responsible for many recent new products and improvements. In this brief review there is space for mention of but two: (1) the synthetic resins, current examples of which are the so-called fused collar, and the crease-resistant finish; and (2) rayon fibre. Neither are new, but it was not until



last year that they were used in a large way, and that those best informed as to their potentialities became convinced that eventually they will attain an outstanding position in the industry. Both are the products of scientific research, and were the major part of the industry already upon a scientific basis we would expect that there would be very general effort by users as well

(Continued on Page 62)



REG. U.S. PAT. OFF.



THERE'S A DUPONT DYE



FOR EVERY TEXTILE USE



REG. U.S. PAT. OFF.

E. I. DUPONT DE NEMOURS & COMPANY, INC.
ORGANIC CHEMICALS DEPARTMENT • DYESTUFFS DIVISION

WILMINGTON, DELAWARE

Rayon Novelties for Spring Season In Big Demand

By Hazel Stanton

CONVERTERS are looking to the Southern rayon weavers as the probable source of new cloths for spring, 1938. The pronounced shortage of rayon yarns in the last few months has limited experimentation which might have been expected to have resulted in new fabric styles, but it is believed that a better supply of rayon will be available by mid-1937 so that mill men will be able to plan on the production of novelties as well as the staple dress goods.

It is generally felt that the Southern rayon mills with their modern automatic looms are in a good position to turn out novelties for the volume dress trade. The weaving technician for one of the large companies recently stated that his visits to his firm's Southern customers had convinced him that they were equal in styling ability to the old line broad silk manufacturers and at the same time possessed the advantage of lower costs because of their more modern machinery.

That converters agree with his judgment seems indicated by a study of sales in the local greige goods market. From flat crepes to triple sheers much of the business placed is going to the larger Southern weaving units. This does not mean that rayon weavers in other sections of the country are without orders, for all mills are operating as many looms full time as they can keep going on present yarn supplies. Any curtailment is due to any inability to obtain sufficient rayon. But reports from some weaving sections, notably the Blackstone Valley in Rhode Island indicate that to show an adequate profit margin mill men feel that newer equipment would be necessary.

Pigment yarn cloths continue to be the big sellers for spring this year. These are going into print lines as carefully styles as were the silk line a few years back. They have completely replaced the weighted silks with the manufacturers of

popular priced dresses.

Second only to the pigment print cloths in volume are the acetate warp viscose filled crepes for printing. These are going into dresses wholesaling from \$10.50 to \$16.75. Some converters have failed to have the success they anticipated with the acetate warp goods, but this is largely due to the fact that they tried to cut costs by having their goods woven by commission weavers and then ordering those mills to cut constructions. The 135x64 crepes are meeting with good sales response, finishers having no difficulty with discharge work on these cloths and converters having devoted considerable care to their styling.

Animated designs are among the favored styles for acetate crepes. These range from animated florals to gay little Latin American motifs. As the season advances, an interest is developing in monotones as well as the multi-color numbers.

Printed sheers of all types are being samples by the dress houses, with the cuprammonium triple sheers furnishing the bulk of the business. There is also an active

demand for flat chiffons of cuprammonium yarn origin and for 50 denier georgettes. Other synthetic yarn sheers which are gaining in popularity are the remains of viscose yarn origin and the sheer alpacas.

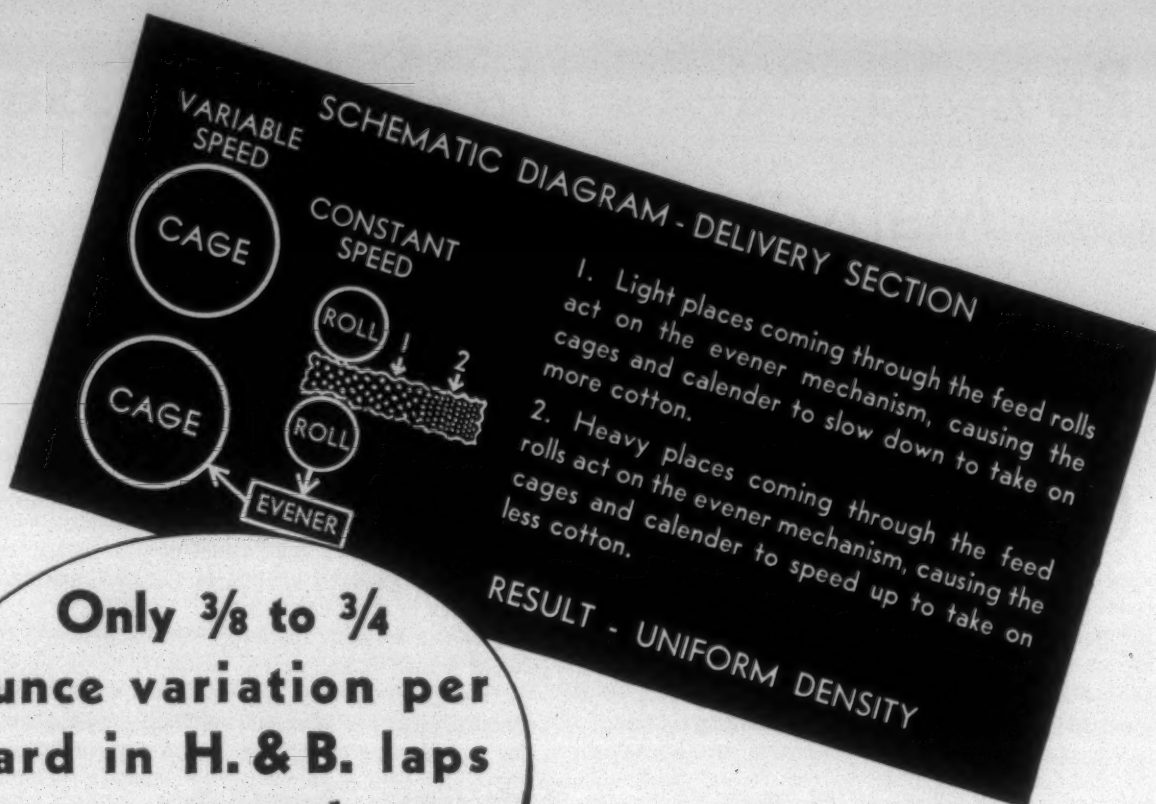
A wide variety of novelty yarn dyed fabrics, both in acetate and viscose yarns, have been styled for summer shirtmaker type dresses by broad silk houses. These include novelty stripes and checks, many types with the colored stripe accented by a line of black yarn. Cutters are sampling these fabrics, but it is too early yet to estimate in what volume they will sell.

The Paris-inspired vogue for sleek black dressmaker type bathing suits is resulting in a good call for acetate slipper satins. Some designers are combining the slipper satin with printed



Courtesy Lockhart International, Inc.

(Continued on Page 68)



**Only $\frac{3}{8}$ to $\frac{3}{4}$
ounce variation per
yard in H. & B. laps
due to patented proc-
ess of evening**

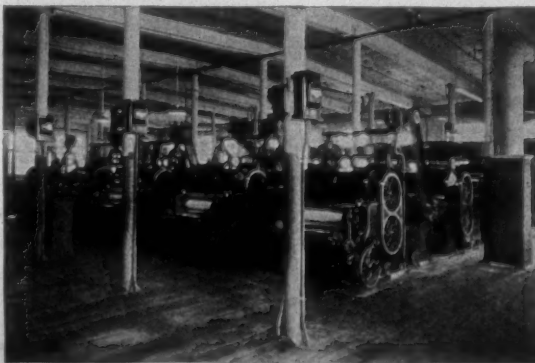
Recent improvements in one process pickers have been given much publicity, partly due to the fact that they reduce yard-to-yard variations in laps to $\frac{3}{4}$ oz. per yd. In this connection we direct attention to the fact that laps made on our H. & B. One-Process Picker with its PATENTED SYSTEM OF EVENING have never varied more than $\frac{3}{4}$ oz. from yard-to-yard and often vary as little as $\frac{3}{8}$ oz.

H. & B. evening is two-fold. The first evener, working in the feed section, controls the speed of the feed rolls and provides for uniform opening. The second evener works in the delivery section and is illustrated and described in the diagram.

Mills using our One Process Picker report as follows regarding laps reprocessed because of imperfections:—only 4 laps out of 700; only 4 laps out of 940; only 4 laps out of 2500; only 4 laps out of 1300. These figures indicate an average productive efficiency of 99.90%.

H. & B. AMERICAN MACHINE CO.
Cotton Preparatory and Spinning Machinery
PAWTUCKET, RHODE ISLAND

BOSTON OFFICE 161 Devonshire Street
ATLANTA OFFICE, 815 Citizens and Southern Ntl. Bank Bldg.
CHARLOTTE OFFICE 1201-3 Johnston Bldg.



H&B

Battery of H. & B. One Process Pickers in a well known New England mill and similar to hundreds of other installations we have made.

ONE PROCESS PICKER

Past 15 Years Have Witnessed Many Major Improvements

By R. J. McConnell

General Manager of Service, Whittin Machine Works

THERE have been three major developments in the past fifty years which have each meant practically a new era in the textile industry from the point of view of effect on the amount of labor required and the cost of producing yarns and cloths. These changes were the replacement of mule spinning by ring spinning, the replacement of the hand-changing shuttle loom by the automatic Northrop Loom and the development of the improved yarn drafting and roving drafting system.

The period since 1921 has been for textile machinery manufacturers one of intensive research and development. This intensive research and development was forced on them by the necessity to produce equipment that would appeal to the mills by returning to them through operating economics, the amount paid for this machinery within a short period and at the same time improve the quality of the product.

Up to this time with but few interruptions the mills had been having ever-increasing markets for their goods and had continuously needed additional machinery: to mills were going through enable them to meet these demands but now the the hardest period in the history of textiles in this country and were conserving every resource in the hope of surviving. Many mills were closing and the best of their equipment was being offered for sale at prices which represented but a fraction of the price of new machinery. Not knowing what the outcome was to be mills which were weathering these severe conditions purchased this used equipment and tightened up their belts to fight it out for a while longer or until they could more intelligently or more accurately gauge what the future had in store for them. During this period in New England nearly five million spindles were taken out of competition by junking or sale to mills which used these machines to replace older ones in their plants. Faced with this situation, the textile machinery manufacturers were hard pressed. In the place of an ever-expanding market which they had had

up until 1921, they saw not only an abrupt stop but competition from the sale of used machinery, much of it of their own make, which could produce nearly as much and nearly as good quality as the new machines they were then offering to the trade.

It was a serious situation. Something had to be done, about it and something was done.

During this period more progress was made in the development of carding and spinning, spooling and warping and twisting machinery than in any similar period in the whole history of the textile industry. Out of this period came a complete change in the methods of opening. In place of former methods where cotton was opened and piled in layers, in a great pile, each layer with a different mark, and from which the man who fed the pickers was supposed to continually take from the front wall so that a proper mixture would be fed to the pickers and which he never did unless the boss was watching, today the bales are laid out on the floor around the feeders and the best practice is to have as many of these

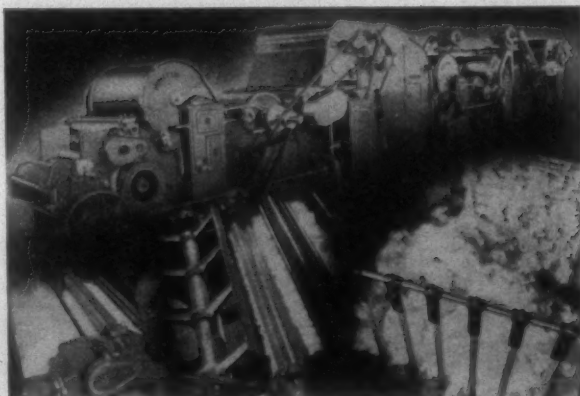
machines as there is room for, so that the cotton on the delivery apron going to the openers will not only be composed of many different bales but in small amounts so that it is thoroughly mixed. Opening machinery was greatly improved and redesigned so that the greatest amount of cleaning and blooming takes place. In the picker room a radical change was made by the development of a one-process picker which took

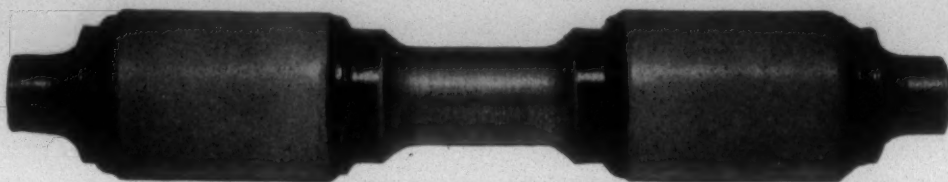
the place of two or three lines formerly used. This new machine not only greatly reduced operating costs but made a lap which was far more even in total weight and yard for yard.

These changes in the opening and picker rooms have improved the succeeding processes to a marked degree.

New stripping systems were invented for cards which made for more economical operation and improved the quality of the work.

(Continued on Page 67)





Foolproof Everlastic

TEXTILE ROLLS

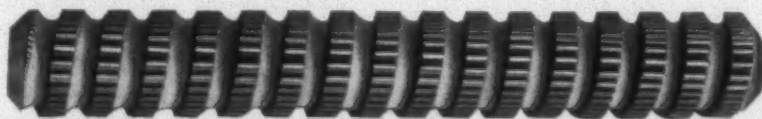
Are now running in 97 Key Mills in the South

By "foolproof" we mean—No grooving, chewing, fluting, lap ups.

By durability we mean 4 to 27 times the life of *any other cot*.

Less end down; as strong or stronger yarn, and markedly more even yarn than with any other cover.

QUALITY :: EXTREME DURABILITY :: RESILIENCY



Evercele

TEMPLE ROLLS

Evercele Temple Rolls, in a test conducted by possibly the most prominent weaver of highly contracted weaves of acetate warps, outlasted all other temple rolls (maximum—200 hours). At the end of 1680 hours, *Evercele* still shows no signs of breaking down.

List of Distributors

Dixie Roll & Cot Co., Macon, Ga.
Dixie Roller Shop, Rockingham, N. C.
A. J. Whittemore & Sons, Burlington, N. C.
Morrow Roller Shop, Albemarle, N. C.

Textile Roll Covering Co., La Grange, Ga.
Columbus Belting & Spool Co., Columbus, Ga.
Greenville Roller Shop, Greenville, S. C.

Southern Agents

Greenville Textile Supply Co., Greenville, S. C.

Odell Mill Supply Co., Greensboro, N. C.
M. Bradford Hodges, Atlanta, Ga.

ROGER W. CUTLER

141 Milk Street
Boston, Mass.

Woodside Building
Greenville, S. C.
Telephone 3775



Textile Industry Pioneered In Air Conditioning

By Wm. B. Hodge*

IN the past three or four years, many headlines have emblazoned "Air Conditioning" as a new industry; one that would "lead the country out of the depression;" one that "offered almost unlimited possibilities for future development;" sort of a "cure-all" for the economic ills with which we were all more or less afflicted.

To many readers this term "Air Conditioning" was new and unheard of, and it has taken several years to sufficiently educate the public, so that the man on the street has at least a meagre understanding of what the term air conditioning implies.

And yet as strange as it may seem, the textile industry has been enjoying the full understanding and use of the term air conditioning since Stuart W. Cramer introduced it in his memorable address entitled "Recent Developments in Air Conditioning," delivered before the American Cotton Manufacturers' Association at its meeting in Asheville, N. C., in 1906.

*Mr. Hodge became associated with Stuart W. Cramer in January, 1907, and has taken an active part in the development of air conditioning equipment since that date. Probably no one connected with the industry is better qualified to give this history of its development.—Editor.

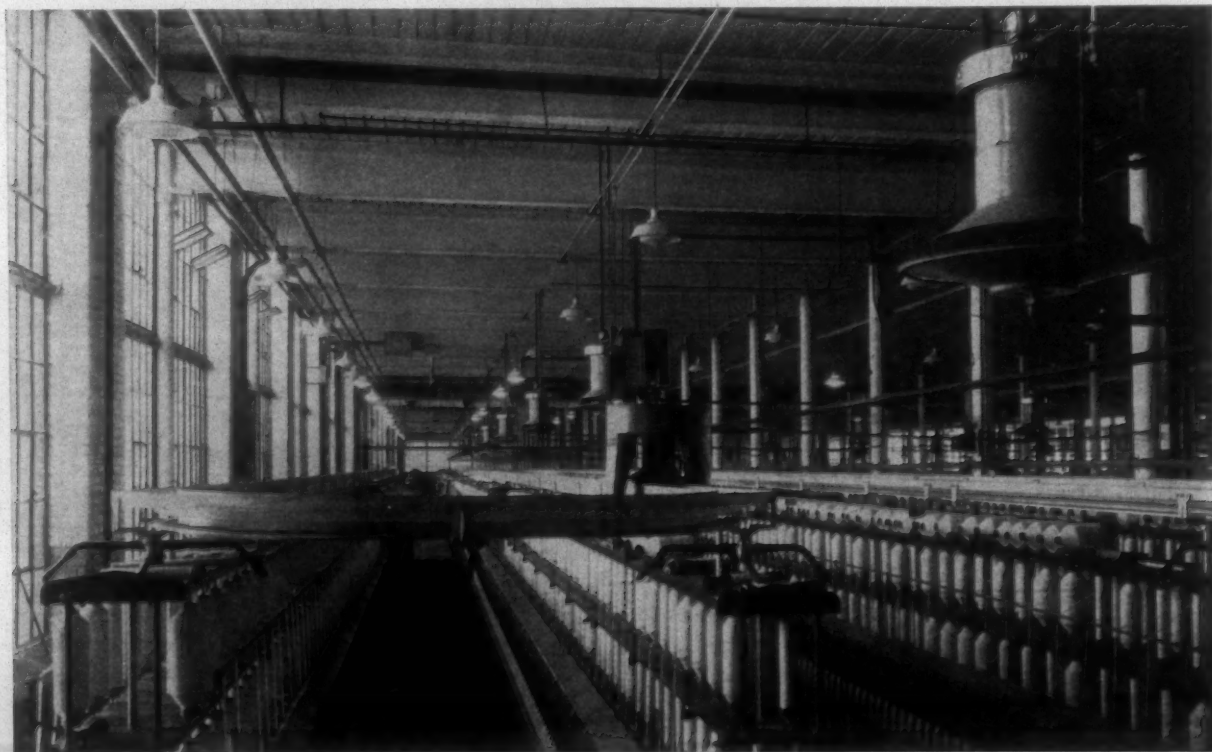
Considerable vagueness has surrounded the origin of this term, and it has been the writer's privilege to dig into the past records to determine, as accurately as possible, the first use of the term and the initial and subsequent development of the art.

The textile industry still recalls the original and notable work, "Useful Information for Cotton Manufacturers," published by Stuart W. Cramer in 1904, with additional editions in the years immediately following.

In Volume II of this work (published in 1904), on Page 369, Mr. Cramer speaks of a complete system for textile plants that will ventilate by the introduction of outside air—cleansing this air—tempering it by the addition of heat during the winter months, cooling it in hot weather, adding moisture to it, and automatically controlling both the temperature and humidity. And he further states that "inside of another year I expect to be in a position to offer such an apparatus to the trade."

In Volume III of this same work, which was published in the Fall of 1906, he refers to his address delivered in

(Continued on Page 64)





casts a fatal shadow on profits

Raises in wages, bonuses, dividends, all added to the long depleted stock of textile fabrics, only serve to accentuate the demand textile mills will be called upon to fill. Which mills are going to show a profit on these orders? Certainly not all of them. Unless your equipment has kept pace with that installed by the most progressive mills, your costs must suffer and your profits dwindle.

Whitin has already dispelled the shadow of obsolete equipment for scores of mills in all branches of the textile field — Cotton, Woolen, Worsted, Rayon, Silk and Asbestos. Many of them devoted weeks to planning improved and economical yarn processing with Whitin representatives. These mills, equipped with modern Whitin machines are experiencing an upswing of their own — and a profit.

We will gladly match your inquiry and your interest with facts and figures on Whitin performance in these mills.

WHITIN MACHINE WORKS

CHARLOTTE, N. C.

WHITINSVILLE, MASS.

ATLANTA, GA.

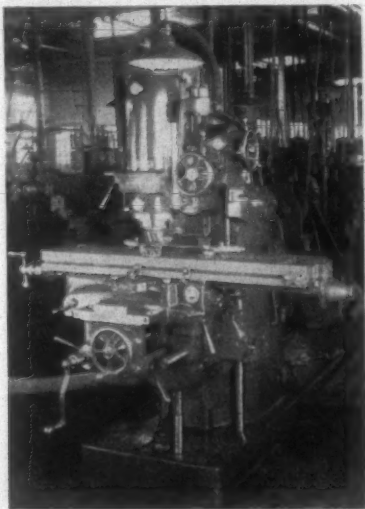
H & B American Machine Company Revamps Plant; Increases Personnel

By William McL. Fraser

Assistant General Manager

IN recent years the term modernize has become almost a by-word in all branches of industry. It is safe to say that practically every branch of business has stressed this point in advertising. H & B American Machine Company have advertised along this line of thought and their sales force has preached it. It is

well to remember, however, that a preacher would do well to practice the precepts which he expects others to follow, and H & B American Machine Company have endeavored to do this very thing. The entire organization has been realigned and new talent has been added in the engineering and research division, also in the factory and other branches of the business.



New Vertical Milling Machine

Among the newer members of the organization are Irving R. Rowe, who was formerly associated as chief engineer with the Atwood Machine Co. He has had nearly twenty years' experience in the designing and development of silk and rayon machinery and has traveled extensively not only in this country but also abroad, obtaining data and analyzing the problems faced by silk and rayon manufacturers. H & B American Machine Company are developing a line of rayon machinery and Mr. Rowe has been placed in charge of this development work. Already some of this equipment is being built for rayon producers.

Otto A. Belger, who formerly operated the Belger Company of Watertown, Mass., has been added to our staff in connection with sales, service, and research. He has had a wide experience both in this country and abroad in the textile field and has promoted several important developments in the textile industry. One of these developments was the Belger Roving Tester, and this machine is now being produced by H & B American Machine Company.

Harold E. Fuller has been added to take charge of personnel work. He has had a wide experience in this

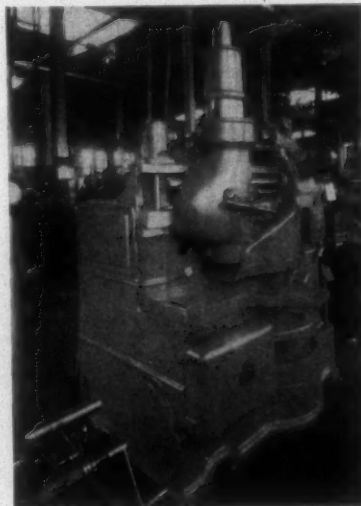
field and was formerly associated with Bird & Son, Inc., manufacturers of roofing materials. Already he has instituted several new programs of personnel work.

In the engineering and research division we have added three widely trained engineers and four practical mill men.

In our sales department we have added C. M. Powell to our Charlotte office, which is in charge of J. Walter Rimmer. Mr. Powell has had a broad experience, not only as a mill superintendent, but also in the textile machinery field. To our Atlanta office, which is in charge of J. Carlile Martin, has been added George W. Murphy, a well known and experienced mill man formerly superintendent of the Columbus Manufacturing Company.

To our Board of Directors we have recently elected S. St. John Morgan, a man widely experienced in business and banking and at one time associated with the Westinghouse Electric & Manufacturing Company.

The present line-up of our organization includes: E. L. Martin, vice-president and general manager; J. W. Richardson, treasurer; Harry Atherton, secretary; William McL. Fraser, assistant general manager; Joseph Chatterton, chief engineer; Christopher Walsh, superintendent; and E. J. McVey, assistant to the vice-president; J. Walter Rimmer, manager of Charlotte office; and J. Carlile Martin, manager of Atlanta office.



New Fellows Gear Shaper

Our Four Roll Long Draft Spinning has reached a high degree of perfection and is increasing in popularity. We have developed a full line of Twisters, both cotton and rayon, which meet practically every requirement in the various branches of the trade. These twisters are outstanding in design and performance. We have developed a New Five Roll Super-draft Roving Frame, which is operating with a high de-

(Continued on Page 60)

ONE HAND... ONE EYE



...that's all you need!

It doesn't take an engineer; it doesn't even take strength, or time, or tools to keep your drives in perfect adjustment . . . all you need is one hand, one eye, and the new Allis-Chalmers Straitline Automatic Ball Bearing Motor Base to do it.

This base rides on ball bearings which make the finest adjustment possible, accomplished as easily as turning a radio dial—all you do is turn a hand-wheel. How do you know when the proper tension is reached? The indicator dial, on this new motor base, tells you exactly what your tension is at all times . . . and you make your

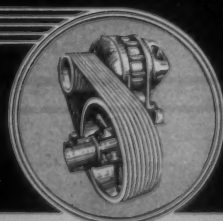
adjustment while running, so that you get the proper tension under operating conditions. The Straitline Automatic Ball Bearing Motor Base eliminates all guesswork.

The chief feature of this new base is that it can be equipped with an attachment for adjusting it, and the new Vari-Pitch Texrope Sheave, simultaneously; thus, retaining proper tension and alignment over the entire range of speed variation resulting from increasing or decreasing the diameter of the Vari-Pitch Sheave.

For additional information write for Bulletin 1261A

Belts by Goodrich

TEXROPE DIVISION
ALLIS-CHALMERS



M I L W A U K E E W I S C O N S I N



Two Views of the Pacolet Mill Taken Shortly After the Tornado Struck the Plant

How Pacolet Rehabilitated Its' Tornado Wrecked Mill

(From the Saco-Lowell Bulletin)

ON April 6, 1936, a disastrous tornado wrecked the No. 4 Mill of the Pacolet Manufacturing Company at Gainesville, Ga. With their usual energy the management immediately began a program of rehabilitation, so that within 48 hours a large crew of men was cleaning up the wreckage, while engineers of the Saco-Lowell Shop were busy in co-operation with the mill staff making plans for a speedy rehabilitation and modernization of the plant.

As a result of the concentrated efforts of the mill staff and our Shops, the plant today is once more operating to its full capacity and is in a better physical condition than it was before the disaster of April 6th.

As an example of the thoroughness of the modernization plan, 16 units of One-Process Pickers were modernized by the addition of Blending Reserves and No. 7 Eveners to each unit.

In the Card Room the drawing was improved by installing new bottom steel rolls and new cork top rolls with all the auxiliary fittings.

In the Spinning Room 176 Model 32 spinning frames with Saco-Lowell Roth Better Drafting replaced the frames which were wrecked by the tornado. The frames which were salvaged from the wreck were thoroughly overhauled and modernized by installing the Saco-Lowell Roth Better Drafting System in place of their three-roll system.

All of this work was carried out in an orderly and systematic manner under the personal direction of D. W. Anderson, treasurer, and Marshall Stone, superintendent. We feel sure that from the results of this modernization the drills, twills, and sheetings of the Pacolet No. 4 Plant will continue to merit the enviable reputation for quality which they have always enjoyed.



View of the Spinning Room in Pacolet Mill No. 4 as it Appears Today

PALATINE

FAST DYE STUFFS

The GDC range of
fast to light and washing
Acid Dyestuffs



GENERAL DYE STUFF CORPORATION

Modern Machines and Methods Establish New Standards

By A. K. Landau
Saco-Lowell Shops

THE progress in cotton manufacturing methods which had been assuming greater and greater momentum through 1935 reached a peak in 1936 when mills recognized and began a large scale adoption of new processes.

The new technique in cotton spinning is a combination of new machines and new processes. It is a result of a departure from the old accepted procedure which concentrated on improvement in machines while somewhat neglecting improvement in methods.

THE OPENING ROOM

The new Saco-Lowell manufacturing process begins in the opening room. To this department has been allocated those functions which have to do with the opening, cleaning, and blending of the cotton. To attain this end, efforts are concentrated on adequate cleaning and opening machines so that the major impurities, not only those heavy ones such as motes, large leaf, and heavy sand, but the lighter ones consisting of dust and small peppery leaf are removed as early as possible.

The result of this process brings the cotton to the pickers in a high state of cleanliness. The final cleaning and blending is accomplished on the one-process picker which, in the most modern installations, is equipped with the blending reserve.

Under ordinary conditions with cotton properly opened, cleaned and blended, the laps will be of a very high degree of uniformity, well sheeted, uniform in density, and with the variation in many cases not exceeding $\frac{1}{2}$ to $\frac{3}{4}$ of an ounce per yard.

All of these openings and cleaning operations can now be conducted in a stabilized atmosphere. In this way not only are variations in the subsequent sliver reduced, but air conditioning in the opening and picking room can be accomplished at a reasonable expense. This is made possible by the Saco-Lowell Recirculating Air Filter.

CARDS

The processes in the card room have undergone a vital change. The only improvement on the card itself is the continuous stripper which reduces waste, labor and lost production, and at the same time increases the recovery of fibre about two pounds out of every 100.

DRAWING

The multiple processes of drawing have been superseded by the Saco-Lowell Controlled Draft Drawing process. This is a two-stage process. The first stage

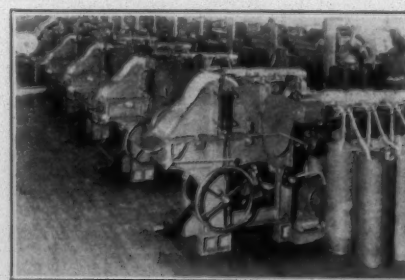
consists of a lap formation and the second, converting the lap into a sliver. The lap, as a rule, consists of 16 slivers and generally weighs from 12 to 15 pounds, just sufficient to produce enough sliver to fill a 12-inch roving can. The lap is then passed through a five-roll controlled draft drawing frame.

In general, the fourth and fifth top rolls are metallic. The third, second and first row top rolls are of cushioned type. On account of these drafts being broken down into four stages, the fibres are under control so that the final sliver is generally twice as even as drawing produced from the same card sliver by the conventional drawing process.

ROVING

Saco-Lowell Controlled Draft Roving process is fast displacing the multi-frame process required in the ordinary card room. Taking its source of supply from the five-roll drawing frame, it forms a roving in three drafting stages which make up a single passage through the machine. The controlled draft of this machine is divided into three distinct zones. The first zone is known as the slubber zone. It lies between the third and fourth rolls. In this zone it is customary to run drafts from 3 to 8.

After the roving leaves the slubber zone, it passes on



the folding zone where the selvages are folded over to the body of the sliver.

The folding mechanism consists of a grooved top roll and tongue bottom roll set on a lower plane than the third and fourth roll. As the sliver passes from the third roll, it follows its contour until it enters the folding roll. As it emerges from the folding roll, it passes to the nip of the front roll which is the final drafting zone. In this zone it is the custom to run drafts from 3.5 to 10.

The process for making roving is generally one of the most expensive in the mill. It requires heavy machinery,

(Continued on Page 59)

QUALITY GOES UP

AND THE COST COMES DOWN



FINISHES IMPROVED WITH NO-ODOROL AFTER-ODORS KILLED

Major user of textiles, America's Automotive Industry has set the pace for better production at lower cost. So, too, is Cyanamid aiding its customers in the Textile Industry to produce higher quality products and to produce them more efficiently.

NO-ODOROL, developed in Cyanamid's laboratory, not only offers textile finishers an opportunity to improve the feel and appearance of a wide variety of fabrics but also enables them to eliminate the danger of rancid "after-odors" that sometimes develop in storage.

NO-ODOROL is recommended for finishing fine cottons, silks and rayon fabrics whether dyed,

printed or bleached. It is an excellent softening agent for use in finishing white goods, and is especially useful for producing pure, soft finishes.

NO-ODOROL is a very desirable product for use as a softening oil for high grade hosiery and knitted fabrics where good appearance and soft feel are necessary.

Fabrics finished with NO-ODOROL will have a full soft hand with absolute freedom from the possibility of after-odors developing upon storage on the shelves of the consumers.

This oil is carried in the three standard grades—90%, 75% and 50%.



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Advantages of Modern Spooling and Warping Equipment

By F. D. Taylor, Barber-Colman Company

BOTH from the standpoint of return on investment and improved running of the work in subsequent processes, it is doubtful if any department lends itself to modernization as does spooling and warping.

That this fact is generally recognized is demonstrated by the extensive replacements made between 1930 and 1935 and the larger number of mills which took steps in this direction at the first signs of improved business conditions.

Accurate information indicates that approximately 70 per cent of all looms in the Southern cotton manufacturing area are operated with warps from some kind of improved spooling or winding and warping.

All improved winding and spooling systems obtain uniform winding speeds by driving the cheese, cone or other yarn package, by contact with a drum or roll. With the old type spooler, due to the spool being driven through its axis, the winding speed increased as the spool was filled and as a result, tension also increased. Constant winding speeds as used with improved systems make uniform tensions possible. Except where extremely high winding speeds are used, such as on the automatic spooler, it is necessary to apply tension to the yarn to obtain a satisfactory yarn package. These tension devices can be adjusted to obtain comparatively low and uniform tension. At higher speeds the friction of the air furnishes sufficient drag to permit delivery of the yarn with minimum tension and maximum uniformity. Lower and more uniform ten-

sion is one reason for improved weaving as the elasticity of the yarn is retained.

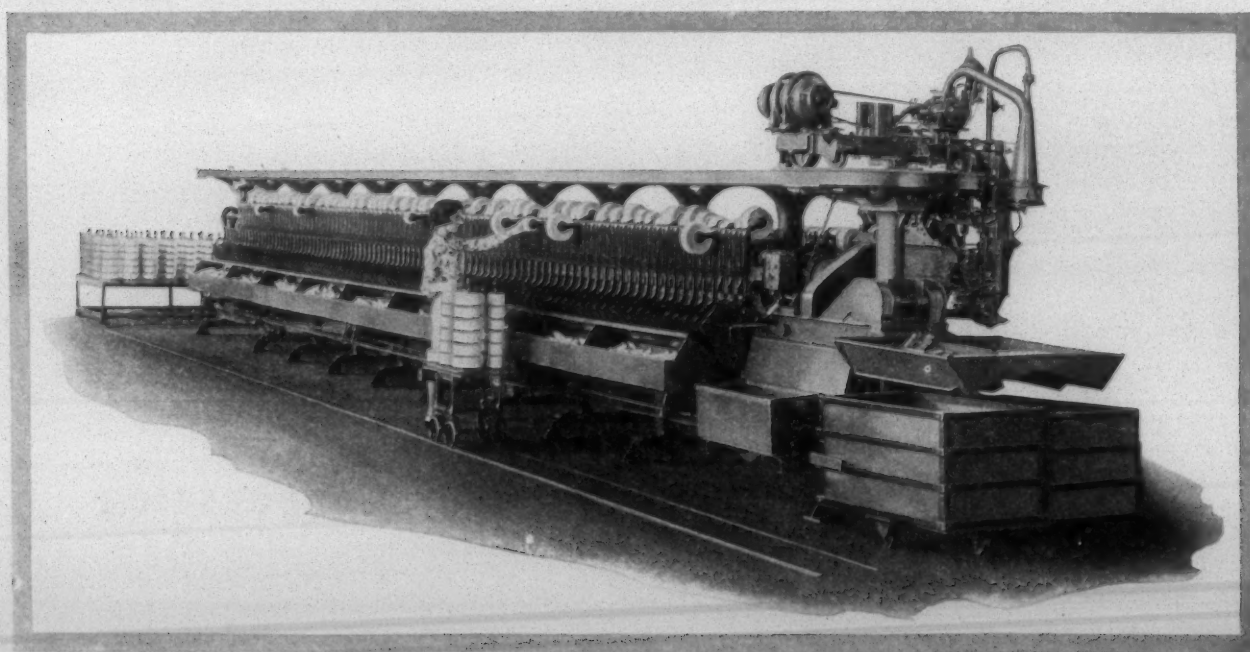
All improved systems recognize the importance of eliminating yarn kinks at time of tying in order to reduce loom stoppage, although it is probable that automatic spooling operates more consistently with a minimum of yarn kinks due to the tying and controlling of slack being entirely mechanical and not depending on the human element.

High winding speeds have increased spindle productivity so that less floor space is required with the improved systems and many times the space released is utilized to advantage in installing new spinning which invariably is of wider gauge.

Larger beams of yarn are possible with the new systems of warping and the increased yardage decreases creeling at the slashers and incidentally reduces waste in this process. Reduced tension inevitably decreases warper stops and this, in addition to more positive stop motions, lessens the possibility of beam laps at the slasher.

Probably the item which leads most, if not all, mill executives to consider making replacement in the spooling and warping department, is the prospect of reducing manufacturing costs. With high speed warpers using the magazine type creel, which is best adapted to long runs on one yarn number, creeling cost is reduced by warping

(Continued on Page 52)





COCHECO

The Better Belting for Better Power Transmission

The quality and durability of the belting not only have a great deal to do with the economy of the driving medium, but with the *efficiency of the drive*. This scene of many belts is laid in one of the production departments of a well-known automotive plant, an indication of the type of plant in which Quality Leather Belts — COCHECO Belts—are giving maximum efficiency in driving service.

Use COCHECO Belting where smooth, uninterrupted power transmission is necessary to profitable production. The COCHECO Book on Belts will tell you why it insures the belting service you demand.

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Growing Consumer Demand For Label Identification

By Geo. R. Horton, Editor Fashion Worth News

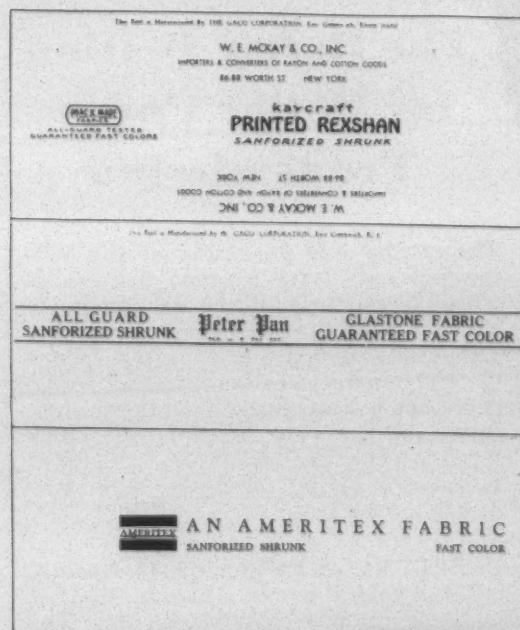
EVER since Eve asked Adam to identify the fur in her newest "draped model," women—and men, too—have wanted to know what they are getting. The what-is-it urge is fundamental in human nature. It always has been and it always will be.

Alert business interests have recognized this factor. As a result, today, a great percentage of all merchandise reaches the consumer thoroughly identified.

This is true of foods and drugs, the law insuring it in many instances by requiring specific information on packaged goods. Automobile sales are "built up" by supplying prospective customers with full construction and performance details.

But in textiles, to a greater degree than in other fields, the use of informative labels and tags has been slow in gaining momentum. Undoubtedly, one contributing factor has been the importance of the Great God Price in the past few years, though even in a price era the urge to "know" is even stronger.

However, the return of larger domestic budgets has been accompanied with a return to quality. More and more, men and women in purchasing ready-to-wear, piece goods, and other merchandise, are voicing that question, "What is it?"



Examples of informative identification now being used on "end of bolt board" by leading piece goods houses.

So repeated and so insistent has this question become that the accumulated effect has backed up on the retailers; backed up through the retailer, too, to the maker of

ready-to-wear and the converter of fabrics. More and more during the past year, these interests have seen in the informative label a sales tool to further sales activity.

Textile interests all down the line are rapidly recognizing that this new readiness—yes, even demand—from consumers for label identification of satisfaction-giving qualities is opening a broader sales field. Carefully constructed fabrics of varying fibre content and fabrics finished to give added service, have more opportunity today, than ever before, to take their proper place in the textile picture, and to gain customer acceptance as much.

Thus the woman who hesitates to pay as much as \$16.75 for a simple cotton frock, considers the garment in an entirely different light when she learns from labels or tags that the print is colorfast, the fabric has been sanforized-shrunk to guarantee it against shrinkage, and the tensile strength is adequate for general wear.

One business group that has consistently urged the use of information identification of merchandise is sanforized-shrunk, sponsors of a shrinkage process. Their experience might well be cited as typical in that it deals with not one but the full gamut of textile interests ranging from gray goods houses through to the retailer.

Up until two years ago, this group found makers of ready-to-wear most reluctant to use hang tags identifying service features. Even when the objective was accomplished, a follow through into retail stores revealed that any one of several things happened to this informative tag.

Retailers objected to any kind of tag arguing that they cluttered up the racks and made the merchandise unsightly. Therefore, in many instances orders were given that all tags be removed in the receiving rooms.

(Continued on Page 54)



Labels and tags giving informative identification.

★ Dollars Go Farther ★
Results are Superior

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Wherever wet processing occurs in the production of textiles, Yarmor 302 Steam-distilled Pine Oil, made soluble, assists in obtaining better results and, by shortening production time, obtains a substantial saving in production costs. This is because of the unusual wetting-out and penetrating properties of Yarmor.

Whether you process cotton, wool, silk, or rayon, it will be to your advantage to investigate the merits of Yarmor 302.

The coupon is for your convenience in obtaining further information.

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1937 CLASSIFICATION OF SOUTHERN MILLS

In the table given below, an accurate tabulation of the spinning, weaving and knitting mills in the Southern States is shown, together with their equipment. The mills are grouped according to their equipment and product. Mills that spin only are grouped accordingly and the same is true of the mills that spin and weave, spin and knit, knit only and weave only. The table also gives the number of mills in each state, the number of spindles, looms and knitting machines, and the total figures, by States and for the whole South.

The convenient arrangement of the table clearly shows each division of the mills, together with their equipment. The information contained in the table is compiled from Clark's Directory of Southern Textile Mills, January 1, 1937.

STATE	SPINDLES				LOOMS				KNITTING MACHINES				TOTALS			
	Spin Only		Spin and Weave		Weave Only		Spin & Knit		Knit Only		Classified		Total		Total	
	Mills	Spindles	Mills	Spindles	Mills	Spindles	Mills	Spindles	Mills	K. M.	Mills	K. M.	Total	Spindles	Looms	Total
Alabama	23	329,970	51	1,489,968	3	135	5	309	13	2,436	176	65	96	1,834,464	35,497	2,745
Arkansas	1	3,000	4	41,992	—	675	—	—	—	—	—	—	5	44,992	675	—
Florida	35	721,264	90	2,614,326	—	—	8	899	8	3,417	—	65	2	—	—	65
Georgia	—	—	1	54,444	8	57,023	—	—	34	5,566	85	8,898	181	3,439,846	57,922	8,983
Louisiana	—	—	12	197,878	—	2,245	—	—	3	774	—	774	4	54,444	2,245	774
Mississippi	2	27,096	12	338,688	2	5,722	2	608	4	587	27	560	21	229,974	6,018	1,195
North Carolina	187	2,636,144	128	3,383,688	43	84,664	8	212,800	195	33,546	1,831	34,160	604	6,179,152	92,785	35,991
Oklahoma	—	—	2	31,744	—	627	—	—	—	—	—	—	2	31,744	627	—
South Carolina	20	245,068	124	5,540,372	13	138,528	1	11,568	8	1,068	1,173	1,173	75	5,785,440	140,319	1,248
Tennessee	12	203,912	17	371,988	7	9,215	9	156,972	67	14,970	553	17,352	122	732,872	9,956	17,905
Texas	4	24,580	24	239,904	—	5,758	—	—	2	182	150	150	30	264,484	5,758	182
Virginia	3	17,800	25	719,478	17	21,036	1	19,200	27	5,387	5,211	5,211	77	737,278	24,175	5,421
Totals	287	4,208,834	478	4,685,782	93	360,855	34	563,390	355	64,581	70,912	2,989,132	19,334,690	375,977	74,509	

Note:

Alabama—One mill spins, weaves and knits.

Georgia—One mill spins, weaves and knits.

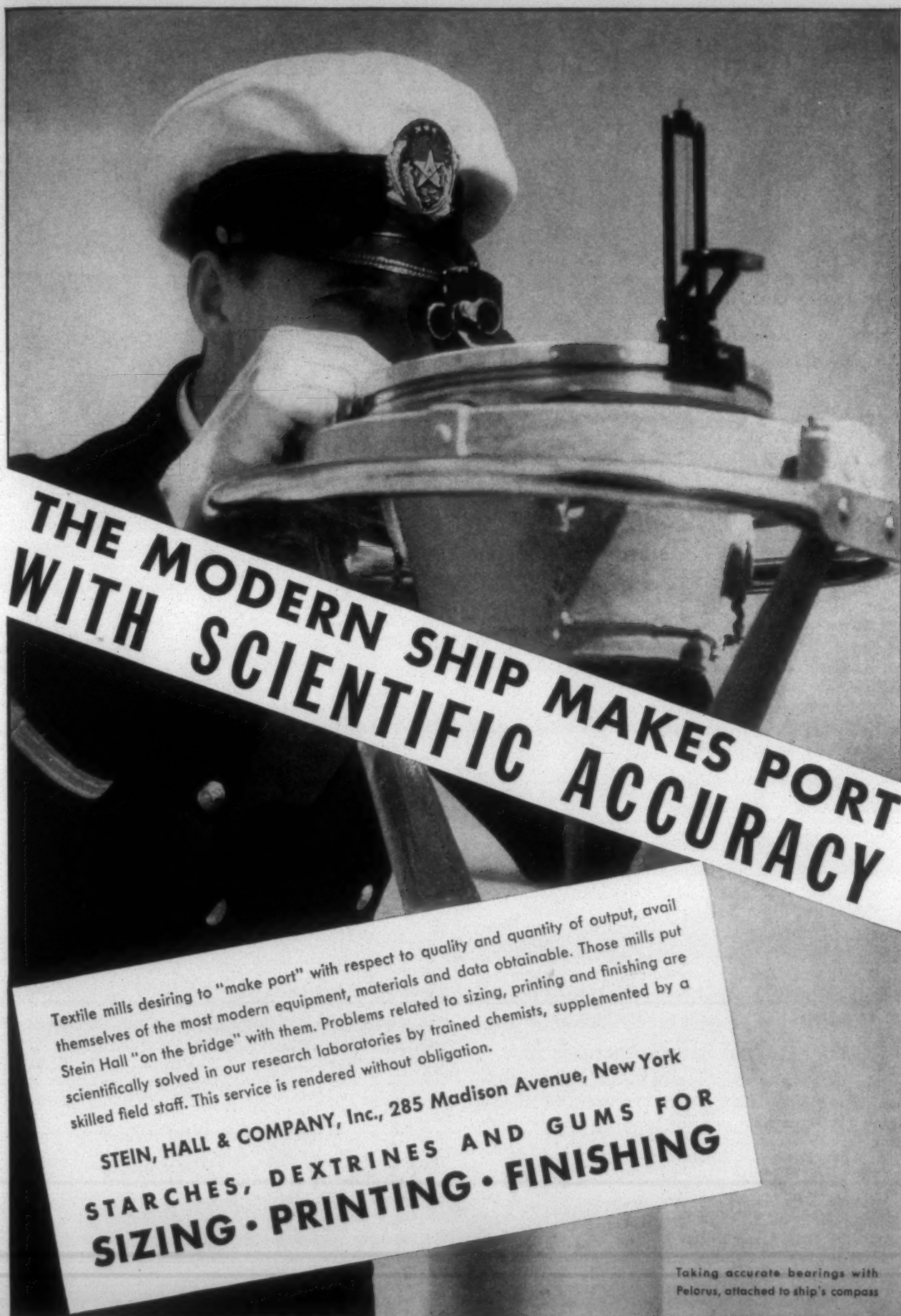
Mississippi—One mill spins, weaves and knits.

North Carolina—Three mills spin, weave and knit.

South Carolina—One mill spins, weaves and knits.

Virginia—One mill spins, weaves and knits.

The total number of mills includes plants, such as dyeing and finishing plants, braiding mills, etc., the equipment of which is not listed above.



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Annual Machinery Increase Figures For The South

Growth of Full-Fashioned Industry Features Expansion

By David Clark

ADDITIONAL equipment was added to Southern textile mills during 1936 but the increases were only slightly more than during 1935 and did not compare with those of normal years in the past.

SPINDLE INCREASE

The increase in spindles was 96,000 compared with 74,832 in 1935. The only other year in which less spindles were added was 1932 when the increase was 40,482. The increase figures do not include replacement spindles, which amounted to a very large figure, or silk throwing spindles, which were probably in excess of 100,000.

LOOMS ADDED

During 1936 there was an increase of 5,562 looms as compared to 4,367 for 1935. Quite a large number of looms were for silk and rayon weaving.

CIRCULAR KNITTING MACHINES

Our compilation shows an increase of 4,412 circular knitting machines during 1936 as compared to a total of 4,774 knitting machines, both circular and full-fashioned, during 1935. A very large number of new knitting mills were erected during the year.

FULL-FASHIONED KNITTING MACHINES

The growth of the full-fashioned knitting industry of the South was very marked as our records show 407 machines added during the year. It is estimated that increases in full-fashioned machines represented an investment of more than \$7,000,000.

The figures shown below give in detail the number of spindles, looms and knitting machines installed in the South in 1936. These figures do not include equipment installed for *replacement purposes*, but represent net gains by the mills listed. The figures do not distinguish between installations of new and used equipment.

Clark's Annual Spindle Increase List

The following tabulations give the name and location of each mill in the South that installed additional spindles during 1936, together with the totals by States:

Alabama

	Spindles
Alabama Mills Co., Aliceville	1,440
Selma Mfg. Co., Birmingham	700
Alabama Mills Co., Clanton	816
Cowikee Mills Co., Eufaula	2,824
Alabama Mills Co., Greenville	1,000
Alabama Mills Co., Haleyville	832
Alabama Mills Co., Jasper	416

Pepperell Mfg. Co.	6,328
Cowikee Mills, Ozark	4,016
West Point Mfg. Co., Riverview	1,224
Alabama Mills Co., Russellville	800
Alabama Cotton Mills, Speigner	208
Alabama Cotton Mills, Wetumpka	416

Total 21,020

Arkansas

Little Rock Textile Co., Little Rock	1,000
--	-------

Total 1,000

Georgia

Perkins Hosiery Mills, Columbus	224
Chicopee Mfg. Co., Gainesville	5,000
U. S. Rubber Products Co., Hogansville	176
Monroe Cotton Mills, Monroe	424

Total 5,824

Mississippi

*Summit Textile Co., Summit	752
Apanaug Mfg. Co., West Point	404

Total 1,156

North Carolina

Efird Mfg. Co., Albemarle	2,368
Cliffside Mills, Avondale	1,020
South Fork Mfg. Co., Belmont	960
Stowe Thread Co., Belmont	2,260
Rhyne-Houser Mfg. Co., Cherryville	5,000
Ruby Cotton Mills, Inc., Gastonia	4,080
Granite Falls Mfg. Co., Granite Falls	1,752
Hudson Cotton Mfg. Co., Hudson	1,050
Indian Creek Mills, Lincolnton	208
Green River Mills, Tuxedo	200
Whitnel Cotton Mills, Whitnel	252
Spofford Mills, Wilmington	1,012

Total 20,162

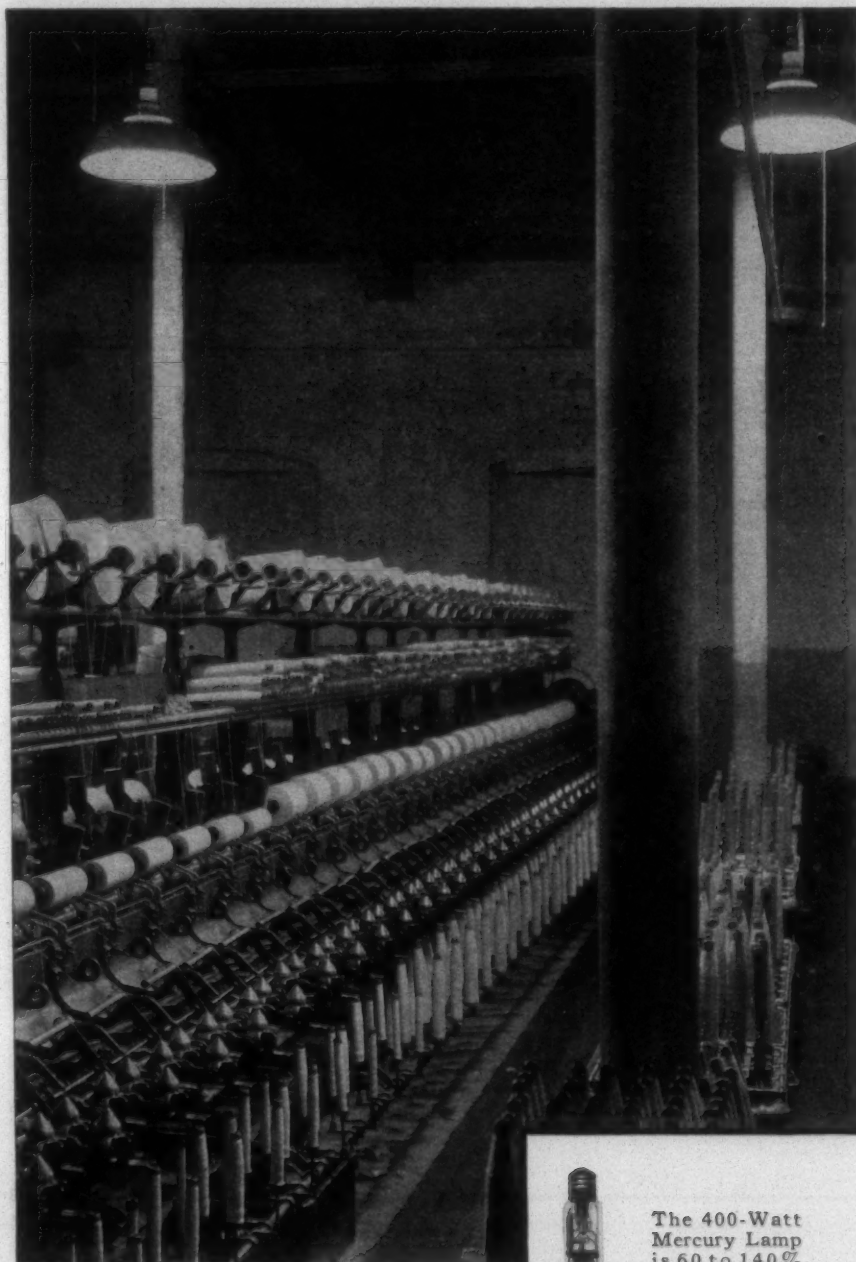
South Carolina

Hampton Spinning Mills, Clover	9,600
Grendel Mills, Greenwood	3,840
Matthews Cotton Mills, Greenwood	2,744
Monarch Mills, Lockhart	640
Pacific Mills, Lyman	1,260
Ware Shoals Mfg. Co., Ware Shoals	5,816

*Indicates new mill.

(Continued on Page 36)

Less "time out" for repairs



With General Electric Mercury Lamps, every thread stands out in bold relief. It does not take long to repair a broken thread under light as good as this.

Today's high-speed winding, spooling and warping operations place a heavy penalty on time lost for repairs. One minute shut-down on the new high-speed machines is equal to five to ten minutes on slow-speed winding and warping. General Electric Mercury Lamps make possible the high levels of illumination that make seeing easy—reducing time out for repairing broken ends to a minimum.

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Annual Machinery Increase Figures*(Continued from Page 34)*

	Looms
Oconee Textile Mills, Westminster	10,000
Total	33,900

Tennessee

Dyersburg Cotton Products, Dyersburg	5,000
Werthan Bag Corp, Nashville	6,146
Total	11,146

Texas

Lone Star Cotton Mills, El Paso	1,792
Total	1,792

Increase By States

	Spindles
Alabama	21,020
Arkansas	1,000
Georgia	5,824
Mississippi	1,156
North Carolina	20,162
South Carolina	33,900
Tennessee	11,146
Texas	1,792
Total	96,000

Clark's Annual Loom Increase List

The following tabulations give the name and location of each mill in the South that installed additional looms during 1936, together with the total by States:

Alabama

	Looms
*Classe Ribbon Works, Anniston	14
Bemis Bag Co., Bemiston	111
Nashua Mfg. Co., Cordova	50
Cowikee Mill Co., Eufaula	141
Alabama Mills Co., Haleyville	12
West Point Mfg. Co., Langale	75
Mobile Cotton Mills, Mobile	148
Pepperell Mfg. Co., Opelika	511
Micolas Cotton Mills, Opp	42
Opp Cotton Mills, Opp	60
West Point Mfg. Co., Riverview	141
Alabama Cotton Mills, Speigner	100
Total	1,405

Georgia

Muscogee Mfg. Co., Mfg. Co., Columbus	50
Covington Mills, Covington	40
Monroe Cotton Mills, Monroe	26
National Dixie Mills, Newnan	13
Arnall Mills, Sargent	144
Scottdale Mills, Scottdale	40
Social Circle Cotton Mills, Social Circle	12
Total	325

North Carolina

Balfour Mills, Balfour	10
Cannon Mills Co., China Grove	133
Cramerton Mills, Inc., Cramerton	84

Carolina Cotton & Woolen Mills, Draper	63
Alexander Mfg. Co., Forest City	20
Gastonia Weaving Co., Gastonia	10
*Carter Fabrics Mill, Greensboro	400
Balsam Mills, Inc., Hazlewood	8
*Premier Silk Mills, High Point	300
Dilling Cotton Mills, Kings Mountain	50
Karastan Rug Mills, Leaksville	17
*Liberty Hosiery Mills, Liberty	30
Jennings Cotton Mills, Lumberton	80
New City Mills Co., Newton	56
Caramount Mills, Rocky Mount	12
Salisbury Cotton Mills, Salisbury	120
Statesville Cotton Mills, Statesville	26
Wade Mfg. Co., Wadesboro	80
Spofford Mills, Wilmington	8
Total	1,507

South Carolina

Gossett Mills, Anderson	107
Arkwright Mills, Arkwright	94
Calhoun Mills, Calhoun Falls	60
Norris Cotton Mills, Catechee	35
Henrietta Mills, Cherokee Falls	102
Clinton Cotton Mills, Clinton	92
D. E. Converse Co., Glendale	16
Woodside Cotton Mills, Greenville	66
Grendel Mills, Greenwood	106
Matthews Cotton Mills, Greenwood	136
Hartsville Cotton Mills, Hartsville	62
Wallace Mfg. Co., Jonesville	26
Easley Cotton Mills, Liberty	64
Pacific Mills, Lyman	71
Pickens Mills, Pickens	16
Excelsior Mills, Union	202
Gossett Mills, Williamston	40
Total	1,295

Tennessee

Werthan Bag Corp., Nashville	322
Total	322

Texas

Kingsville Cotton Mills, Kingsville	12
Texas Gauze Mills, New Braunfels	30
Total	42

Virginia

Frank Ix & Sons, Charlottesville	176
Fieldale Mills, Fieldale	84
Washington Mills, Fries	110
*Quaker Silk Co., Petersburg	140
*Stuart Silk Mills, Stuart	30
Total	540

Increase By States

Alabama	1,405
Georgia	325
Mississippi	126
North Carolina	1,507
South Carolina	1,295

*Indicates new mill.

(Continued on Page 38)

QUALITY LOOM HARNESS EQUIPMENT

Stehedco

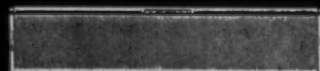
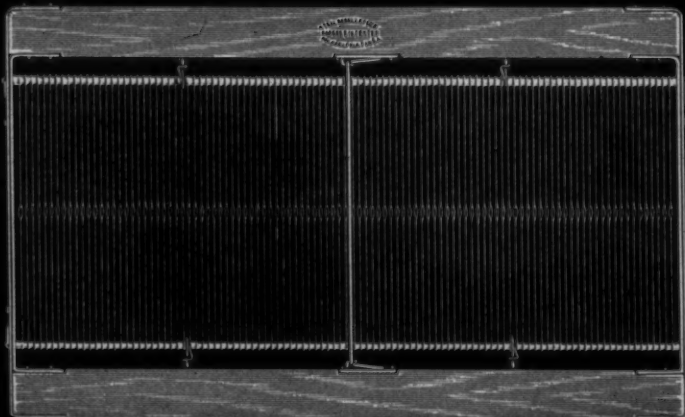
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Annual Machinery Increase Figures*(Continued from Page 36)*

	Looms
Tennessee	322
Texas	42
Virginia	540
Total	5,562

Circular Knitting Machine Increase

The following tabulations give the name and location of each mill in the South that installed additional circular knitting machines during 1936, together with the totals by States:

Alabama

	Knitting Machines
Russell Mfg. Co., Anniston	40
Taladega Cotton Factory, Talladega	7
*Menton Mills, Valley Head	60
Total	107

Georgia

Camilla Hosiery Mills, Camilla	2
Cartersville Mills, Cartersville	20
*E. W. Babb, Dallas	32
Spalding Knitting Mills, Griffin	34
Walker County Hosiery Mills, Lafayette	103
Carmichael Hosiery Mills, McDonough	12
McDonough Hosiery Mills, McDonough	3
Bibb Mfg. Co., Macon	150
Montezuma Knitting Mills, Montezuma	15
Moreland Knitting Mills, Moreland	15
*Spotlight Hosiery Mills, Rome	30
Golden City Hosiery Mills, Villa Rica	20
Total	436

Mississippi

Columbine Knitting Mills, Columbia	15
*Summit Textile Co., Summit	8
Total	23

North Carolina

Black Mountain Hosiery Co., Black Mountain	6
Flint Hosiery Co., Burlington	40
Peerless Hosiery Mills, Burlington	20
Sykes Hosiery Mills, Burlington	20
Currie Hosiery Mills, Carthage	32
*Little Hosiery Mill, Claremont	50
Concord Knitting Co., Concord	60
Sherwood Knitting Co., Cornelius	27
Mol-Val Mills Co., Denton	10
*Thornton Knitting Co., Denton	40
Chipman-La Cross Hosiery Mills, East Flat Rock	100
*Carolina Hosiery Mill, Elizabeth City	145
Ragan-Parker Knitting Co., Ellerbe	24
*Glen Raven Hosiery Mills, Glen Raven	40
*Esther Hosiery Mills, Graham	44
Thompson Hosiery Mills, Graham	10
*Berton Hosiery Mills, Granite Falls	35
Caldwell Hosiery Mills, Granite Falls	6
Granite Hosiery Mills, Granite Falls	9
Madaris Hosiery Mills, Granite Falls	30
*Brooks Hosiery Mill, Hickory	31
*Catawba Hosiery Mill, Hickory	20
G. & H. Hosiery Co., Hickory	7

Hickory Hosiery Mills, Hickory	13
Hicks & Johnson Hosiery Co., Hickory	5
Kramer-Hollar-Brown Co., Hickory	100
*Marlow Hosiery Mill, Hickory	25
Walton Knitting Mills, Hickory	20
Westview Hosiery Mills, Hickory	25
Whisnant Hosiery Mills, Hickory	76
Adams-Millis Corp., High Point	60
Bales Hosiery Corp., High Point	116
Crown Hosiery Mills, High Point	30
*Greeson Knitting Mill, High Point	30
Kimbrow Hosiery Mills, High Point	30
Lock-Knit Hosiery Mills Co., High Point	21
Silver-Knit Hosiery Mill, High Point	5
Terry Hosiery Mills, High Point	5
Triangle Hosiery Co., High Point	57
Washington Mills Co., Mayodan	65
*Midland Hosiery Mills, Midland	63
Argonne Hosiery Mills, Mt. Airy	5
*Shafer Hosiery Mill, Mt. Airy	25
Ridgeview Hosiery Mill, Newton	41
Commonwealth Hosiery Mills, Randleman	85
Grenaco Knitting Mills, Rockingham	50
Clark Knitting Mills, Rutherfordton	13
Summer Hosiery Mill, Salisbury	5
Linmont Mills, Sevier	16
Stanfield Hosiery Mills, Stanfield	8
Phoenix Mills, Inc., Statesville	50
Statesville Hosiery Mills, Statesville	90
Runnymede Mills, Inc., Tarboro	20
*Barnett Hosiery Mills, Taylorsville	60
Fremont Hosiery Mills, Thomasville	10
Waldensian Hosiery Mills, Valdese	115
West Knitting Co., Wadesboro	38
Indera Mills, Winston-Salem	27
Total	2,230

South Carolina

Appalache Hosiery Mills, Landrum	15
Total	15

Tennessee

*Charleston Hosiery Mill, Charleston	52
Lyerly Hosiery Mills, Lyerly	33
McAllister Hosiery Mills, Chattanooga	100
Mountain City Hosiery Mills, Chattanooga	5
*Cherokee Hosiery Mills, Cleveland	42
*Milne Hosiery Mills, Cleveland	12
Walbridge Knitting Mills, Dayton	2
*Decatur Hosiery Mills, Decatur	25
Dyersburg Cotton Products, Dyersburg	139
*Ricks Knitting Mills, Greenville	250
*Rixter Knitting Mills, Kingston Springs	50
*Nolde & Horst Co., McMinnville	25
*Hambler Hosiery Mills, Morristown	30
Quality Hosiery Mfg. Co., Murfreesboro	8
May Hosiery Mills, Nashville	267
Dixie Hosiery Mills, Newport	155
Philadelphia Hosiery Mills, Philadelphia	40
Rockwood Mills, Rockwood	26
McGill Mills, Shelbyville	5
Soddy Hosiery Mills, Soddy	19
*Lorraine Mills, Inc., Sweetwater	65
Total	1,350

*Indicates new mill.

(Continued on Page 50)



PRECISION BEARINGS in 108 distinct series

To the machinery world, NORMA-HOFFMANN offers the most complete and comprehensive line of anti-friction bearings in America—108 distinct series—a PRECISION Bearing for every load, speed and duty.

Many of these have been pioneered, or specially developed, by NORMA-HOFFMANN engineers to meet specific requirements as revealed by advancing methods in machine design, manufacture and operation.

In times past, engineers often had to adapt their designs to the comparatively few standard bearing types then available. Today—with the wide range of types and sizes afforded by the standard NORMA-HOFFMANN PRECISION line, such compromise is seldom necessary.

In the 108 PRECISION Series are included: ball, roller, needle and thrust bearings; open, closed, and angular contact bearings; radial and self-aligning types; single and double row types; felt-protected, shielded, snap ring and self-sealed types. The size range is from $\frac{1}{8}$ - to 21-inch bore, embracing both metric and inch sizes. PRECISION Ball and Roller Bearing Pillow Blocks are also available in an extensive range of sizes.

Write for the Catalog. Let our engineers work with yours.

NORMA-HOFFMANN
PRECISION BEARINGS
BALL. ROLLER AND THRUST

NORMA-HOFFMANN BEARINGS CORPN., STAMFORD, CONN. U.S.A.

Personal News

O. O. Bray has been promoted from section to second hand night, Monroe (Ga.) Cotton Mills.

B. L. Barker has been promoted from slubber tender to card grinder, Monroe (Ga.) Cotton Mills.

Edgar Lane has been promoted from second hand to overseer of weaving at the Enterprise Mill, Augusta, Ga.

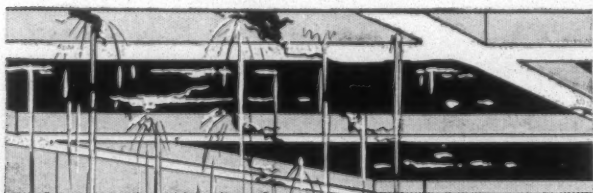
J. C. Baucom has accepted the position of superintendent of the Roberta Mills, Concord, N. C.

H. H. Spray has accepted the position of overseer of carding at the Jefferson Mills, Jefferson, Ga.

Virgil Herring has been promoted from grinder to second hand, second shift carding, Monroe (Ga.) Cotton Mills.

M. V. Guest has been promoted from fixer No. 1 Mill, Jefferson, Ga., to night overseer weaving Mill No. 2, Crawford, Ga.

It was announced in last week's issue that Jack M. Alexander had joined the sales force of the "Carolina" Broom and Mop Company. The correct name of the concern is the Piedmont Broom and Mop Company. Mr. Alexander will represent the company in the Southern territory.



LEAKING ROOFS

cause losses amounting to thousands of dollars a year. Avoid such waste with

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You can absolutely depend on
STONHARD RESURFACER
for the quickest and most economical
means of permanently eliminating

RUTTED FLOORS



I. B. Williams, who retired some time ago as overseer at Whitehall, Ga., is now night overseer spinning, Jefferson Mills No. 2, Crawford, Ga.

T. F. Blume has resigned as superintendent of the Roberta Mills, Concord, N. C., and will devote all of his time to the White Park Mill Company.

Claude F. Pipes has resigned as assistant agent of the Postex (Tex.) Cotton Mills to become superintendent of the Houston (Tex.) Textile Company.

Claude T. Kay, formerly of Joanna Cotton Mills at Goldville, S. C., but more recently of Draper, N. C., has accepted a position as overseer of weaving with the Pelzer Mills, at the lower plants, Pelzer, S. C.

The Goodyear Tire & Rubber Co., Inc., Akron, Ohio, announces the recent appointment of E. A. Filley as Southern District Manager of the Mechanical Goods Department, with headquarters in Atlanta, Ga.



E. A. Filley

Mr. Filley has been with Goodyear for many years, representing the Mechanical Goods Department in Cleveland, Detroit, Akron, and Richmond districts previous to his promotion to the Southern District at Atlanta. Mr. Filley will supervise Mechanical Goods sales in Goodyear's Atlanta, Birmingham, New Orleans, Jacksonville, Charlotte and Rich-

mond branches.

Fred L. Still, superintendent of the Greer, S. C., plants of Victor-Monaghan Company, and president of the Southern Textile Association, was reported confined to his home by a slight illness, as this issue went to press.

Jesse M. Jones has been appointed assistant superintendent of the John P. King Manufacturing Company, Augusta, Ga. Mr. Jones is a graduate of the Alabama Polytechnic Institute, having received the degree of Textile Engineering in 1932. He was formerly with the W. A. Handley Manufacturing Company, Roanoke, Ala.

S. R. Lindsay has accepted a position as weave room overseer, Monroe Cotton Mills, Monroe, Ga. Mr. Lindsay was formerly overseer weaving, Lafayette Division, Consolidated Textile Corporation, Lafayette, Ga. Prior to this he was with Draper Corporation in Southern territory for eight years.

New Textile Patent

Andrew L. Taylor, of Goldville, S. C., has secured a patent on automatic means for replenishing the rovings in a spinning frame, according to announcement by Paul B. Eaton, patent attorney. When a skewer becomes empty it falls through a slot and trips a mechanism to bring in another skewer and feed its end to the back drafting rolls. One-half interest in this patent is assigned to P. B. Mitchell, also of Goldville.

OBITUARY

W. C. HEATH

Monroe, N. C.—Maj. W. C. Heath, 70, one of Monroe's pioneer citizens, died suddenly Sunday afternoon at the home of a neighbor. Death came suddenly as he was talking to friends.

Major Heath was born November 24, 1866, in Lancaster County, the son of the late W. A. and Nannie Crow Heath. His father was a lieutenant in the Confederate Army.

He was one of the organizers and served as president of the Southern Cotton Spinners' Association, which later changed its name to the American Cotton Manufacturers' Association.

EDWARD C. PETERS

Atlanta, Ga.—Edward Conyngham Peters, local capitalist and civic leader and president of the Exposition Cotton Mills, Griffin, Ga., died Monday at his Atlanta residence, Ivy Hall, after an extended illness.

Mr. Peters was president of the Exposition Mills for 26 years, being elected to that office to succeed the late Dr. J. D. Turner. Prior to that time he had served the mills for a number of years as vice-president.

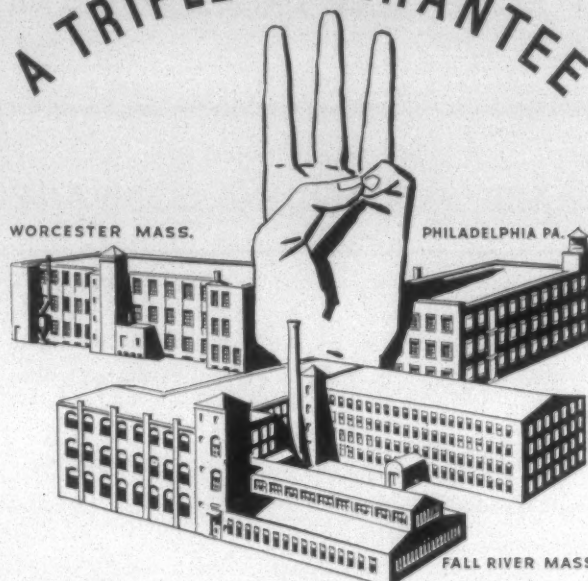
Mr. Peters and his father purchased stock in the mills when they were organized in 1880. Mr. Peters was one of the organizers of the Cotton States Exposition in Atlanta. Following this highly successful venture, Mr. Peters and his associates presented the tract of land on which the Exposition had been staged to the City of Atlanta and it became known as Piedmont Park.

Sanforized-Shrunk Yardage Sets New Record

Total yardage of cotton and linen fabrics sanforized-shrunk during the final quarter of 1936 established a number of new records, according to John C. Turrell, director in charge of Sanforized-Shrunk Division of Cluett, Peabody & Co. Not only did it mark the close of the most successful year for that division, but the fourth quarter recorded the largest yardage of fabrics ever sanforized-shrunk in any single quarter. A new record in percentage of increase over corresponding quarters of previous years also was recorded.

Public acceptance of a satisfactory result so far as concerns shrinkage is responsible for this great increase in volume, declared Mr. Turrell. The total increase in yardage passing over sanforizing machines during the final quarter of last year, as compared with the same quarter a year ago, represents a strip of cloth more than 25,000 miles in length, that would encircle the earth at the equator.

A TRIPLE GUARANTEE



of Uninterrupted Service

This winter's floods are a vivid reminder that no factory is immune to the hazards of the elements.

We can not eliminate these hazards, but we can and have built up reserve defense against them in the form of 3 separate *manufacturing* plants in three widely different localities.

While each factory has its specialty, all of them are well equipped to make any card clothing item in our line, if the occasion demands. Hence, if one (or even two) of our factories is temporarily disabled, we still have a factory left that can give you reasonably prompt service.

When you specify Ashworth, you get not only the best in card clothing but also a TRIPLE GUARANTEE of uninterrupted service.

ASHWORTH BROS., INC.

Woolen Division; AMERICAN CARD CLOTHING CO.

Factories in Fall River, Worcester and Philadelphia

Sales Offices and Repair Shops in Charlotte, Atlanta and Greenville

Southwestern Representative: Textile Supply Co., Dallas, Tex.

PRODUCTS AND SERVICES: Card Clothing for Cotton, Wool, Worsted, Silk and Asbestos Cards and for All Types of Napping Machinery; Brusher Clothing and Card Clothing for Special Purposes; Lickerin Wire and Garnet Wire; Sole Distributors for Platt's Metallic Wire; Lickerins and Top Flats Reclothed at All Plants.

Ashworth
PIONEERS IN
CARD CLOTHING

TEXTILE BULLETIN

Member of
Audit Bureau of Circulations and Associated Business Papers, Inc.

Published Every Thursday By

CLARK PUBLISHING COMPANY

Offices: 118 West Fourth Street, Charlotte, N. C.

Eastern Office: 434 New Industrial Trust Bldg., Providence, R. I.

David Clark - - - - - Managing Editor
Junius M. Smith - - - - - Business Manager

SUBSCRIPTION

One year payable in advance	\$2.00
Other Countries in Postal Union	4.00
Single Copies	.10

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

Annual Review Figures

OUR Annual Review figures, published elsewhere in this issue, shows that the number of spindles and looms installed in Southern mills last year, while slightly greater than for 1935, was considerably below the average of recent years, but that the building of knitting mills and installation of additional knitting equipment continued at a very steady rate.

Clark's Annual Spindle Increase List shows that 96,000 spindles were installed in 1936. This is far less than has been the case in many years; in fact, with the exception of 1935, being the smallest number since 1932, when only 40,482 spindles were added.

The figures show that a total of 5,562 looms were installed in 1936, as compared with 4,367 looms installed during the previous year.

It must be borne in mind that these figures do not include machinery bought for replacement purposes and that some of the increases are represented by second hand machinery.

The knitting mills of the South, which for some years past have led all other divisions of the industry in expansion, continued to set the pace last year. A total of 4,412 additional circular knitting machines, and 407 full-fashioned machines, were installed during 1936.

The record of increase in Southern mills in recent years has been:

1913	435,300
1914	329,410
1915	340,886
1916	619,682
1917	546,168
1918	319,546
1919	425,844
1920	663,446
1921	298,328
1922	285,868
1923	730,812
1924	400,848
1925	530,396
1926	343,800
1927	565,500
1928	331,692
1929	419,790
1930	150,688
1931	139,076
1932	40,482
1933	279,750
1934	322,768
1935	74,832
1936	96,000

The 1936 spindle increase by States was:

	Spindles
Alabama	21,020
Arkansas	1,000
Georgia	5,824
Mississippi	1,156
North Carolina	20,162
South Carolina	33,900
Tennessee	11,146
Texas	1,792
Total	96,000

The 1936 loom increase by States follows:

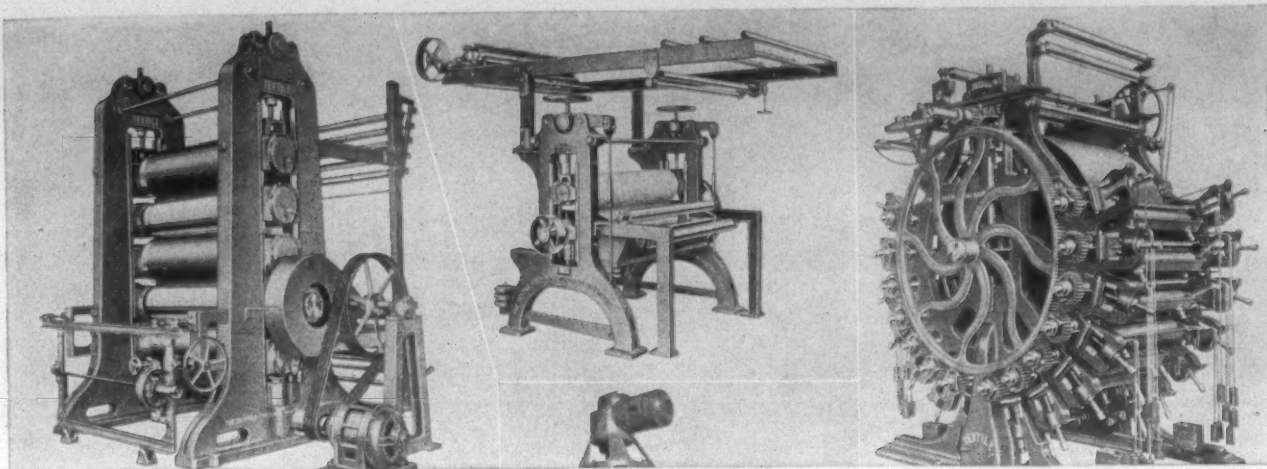
	Looms
Alabama	1,405
Georgia	325
Mississippi	126
North Carolina	1,507
South Carolina	1,295
Tennessee	322
Texas	42
Virginia	540
Total	5,562

The 1936 circular knitting machine increase list by States follows:

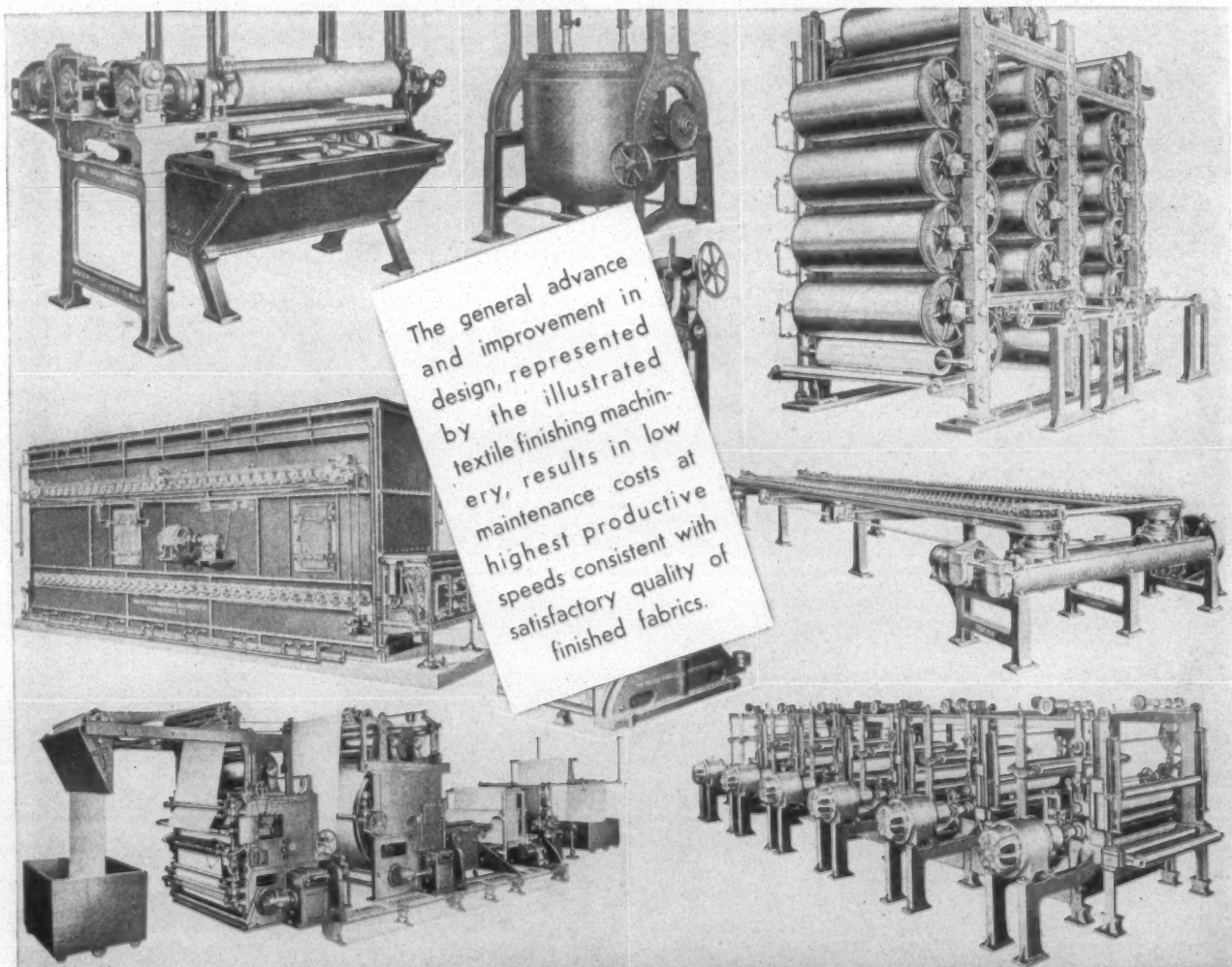
	Circular K. M.
Alabama	107
Georgia	436
Mississippi	23
North Carolina	2,230
South Carolina	15
Tennessee	1,350
Texas	65
Virginia	186
Total	4,412

The 1936 increase in full-fashioned knitting machines by States was:

	Full-Fashioned K. M.
Alabama	28
Georgia	20



Advanced Design in Finishing Machinery



The general advance and improvement in design, represented by the illustrated textile finishing machinery, results in low maintenance costs at highest productive speeds consistent with satisfactory quality of finished fabrics.

The Textile-Finishing Machinery Co.

New York Office
50 Church St.



Providence, R. I.

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UNIFORM WINDING

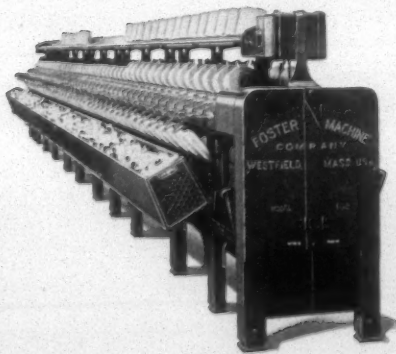
PROMOTES UNIFORM PACKAGE DYEING

One extra soft or extra hard package in a dye lot will usually cause uneven dyeing in every package on that particular spindle. In short uniform package dyeing requires uniform package density.

The Foster Model 102 gives uniform package density because it rotates the packages at a constant speed, no matter what the diameter, because its traversing mechanism can produce a suitable open wind and because its tension and pressure devices are specially designed for accurate control.

Further details on request

FOSTER MACHINE CO.
Westfield, Mass.



FOSTER MODEL 102

PRODUCTS OF FRANKLIN PROCESS SPECIALIZATION

Men's shirts in recent years have been distinguished by their wealth and depth of color. Franklin Process performance (due to specialization) has made them possible. However, there are problems in the application of colored yarns to shirtings that require the advice of a specialist in this art and mills and converters who choose to consult with us on such problems may thus benefit from our knowledge gained through years of experience.

A CORNER OF THE LARGEST PACKAGE DYE HOUSE IN THE WORLD



THE *Rewards* OF SPECIALIZATION

The rewards of specialization in industry go not alone to the business that specializes, but also to the customers of that business. These rewards include greater economy and better quality due to quantity production, to standardization, and to the skill acquired by constant application to similar problems; the avoidance of many mistakes that the inexperienced can not anticipate; and the better service that accrues due to the foregoing advantages.

Franklin Process has specialized in package dyeing since 1910. Each year it has done this one

job better, not only because of greater experience but also because of a continuous plant modernization program. Franklin Process equipment to-day includes the latest type winders and stainless metal dyeing machines.

Good package dyeing (particularly fast color package dyeing) requires highly specialized knowledge and Franklin Process, as a specialist in this field, offers advantages to its customers that are not available to others, not even to mills with their own dye houses.

Franklin Process

SPECIALISTS IN PACKAGE DYEING SINCE 1910

Colored Yarns Glazed Yarns Custom Yarn Dyeing Dyeing and Processing Machines
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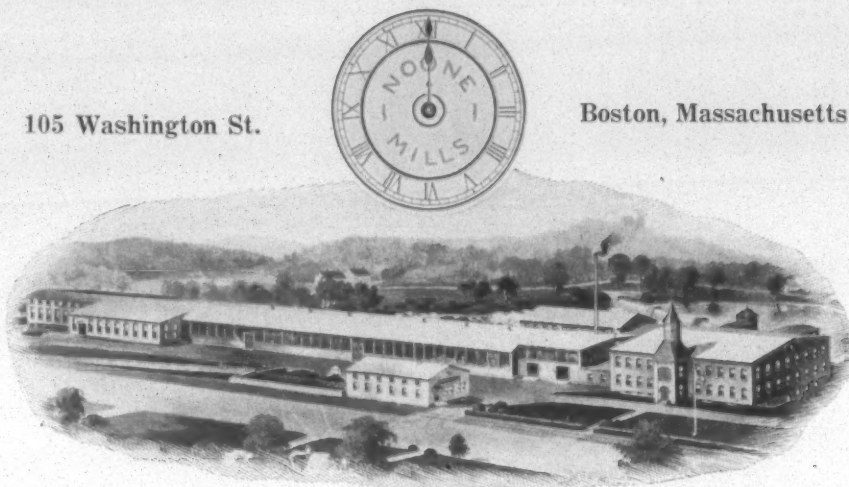
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A. ERLAND GOYETTE, President

ARNOLD T. MALONE, Treasurer

105 Washington St.

Boston, Massachusetts



Established 1831

Noone's Standard Roller Cloths

Since 1831 NOONE'S have been the Standard Roller Cloths.

The quality and constructions of the Roller Cloth used on your spinning rolls is very important to efficiency in many departments of your plant.

NOONE'S can supply you with the type of cloth best suited to your particular class of work.

Ask to be shown.

Use NOONE'S Roller Cloths and be assured of proper resiliency and that sturdy durability that enables you to produce a strong, round, uniform, smooth running yarn at most reasonable cost.

Since the first spinning rolls were covered in America, a great many substitutes for Woolen Roller Cloth and Leather have been introduced; as is usually the case with something new that is highly advertised, many are eager to give it a trial, hoping that its advertised wonders will prove true, but not one substitute yet produced has met the test of NOONE'S Standard Roller Cloths and a good Leather for covering spinning rolls.

Many manufacturers have tried substitutes from time to time, only to, sooner or later, become convinced of the much greater efficiency and far-reaching economy of a good Roller Cloth and good Leather.

Make sure that your Roll Coverer is using NOONE'S Roller Cloths on your rolls.

Southern Office
11 James Street
Greenville, S. C.

Sole Agents For
The Joseph Noone's Sons Company
Peterborough - - - New Hampshire

North Carolina	162
South Carolina	36
Tennessee	63
Texas	2
Virginia	96
Total	407

Packing the Supreme Court

AN attorney or a client who was found guilty of attempting to place his friends or associates upon a jury would be subject to contempt of court and be condemned by all decent people.

An attorney or client who deliberately sought to bring a case before a judge known to be favorable to his side would be condemned by all right-minded citizens.

No ethical lawyer or citizen who had an ounce of self respect would admit that he desired his case to be heard before a judge or a jury which was known to be already committed to his side.

A President of the United States, however, deliberately and openly announces a plan which is interpreted to mean that he seeks to pack the Supreme Court of the United States with men known to be favorable to unconstitutional legislation which he personally favors.

The Constitution of the United States as originally drafted said:

All legislative powers herein granted shall be vested in a Congress of the United States which shall consist of a Senate and a House of Representatives.

Many argued, at that time, that the above made it plain that Congress could only exercise those powers granted to it, but the States refused to ratify the Constitution until the following amendment was adopted:

The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States, respectively, or to the people.

President Roosevelt doubts that the States, and the peoples thereof, would be willing to relinquish such reserved powers, and because he is afraid to submit the question to the people for a decision, deliberately makes an effort to pack the United States Supreme Court with Richbergs, Frankfurters and others, willing to do his bidding and willing to render decisions contrary to the law.

Have the morals of the people of the United States become so dormant that they will not condemn such an effort?

There are other days and other years yet to come and in the ordinary course of events, there will be other Congresses and other Presidents of

the United States and possibly some of those who are to come will have other pet legislation which they may wish to see confirmed.

If President Roosevelt shall have the right to pack the Supreme Court in order to enact laws which he dares not submit to the peoples of the States, then other Presidents may pursue a similar plan and the Constitution of the United States shall become ineffective and only a scrap of paper.

The Passing of An Old-Timer

THE death of W. C. (Will) Heath at Monroe, N. C., marked the passing of one of the "old-timers" of the cotton manufacturing industry of the South and one of its best fighters.

Will Heath was an active member of a group of yarn spinners, of 35 to 40 years ago, which included such men as Bob Reinhardt, Geo. Hiss, Bob Miller, D. A. Tompkins, Abe Rhyne, Col. Anthony, R. R. Ray, J. H. McAden, C. E. Hutchison, J. W. Cannon and others.

He was present in the bar room of the old Cenral Hotel in Charlotte when the Southern Cotton Spinners' Association, now the American Cotton Manufacturers' Association, was organized.

There are some who might object to broadcasting the fact that the American Cotton Manufacturers' Association was organized in a bar room but such is a fact.

In the early part of 1897 a group of yarn spinners were congregated in the bar room of the Central Hotel in Charlotte, and as was the custom of yarn spinners in those days and has been ever since, they were cussing the prices being received for yarns and blaming the selling agents.

The more drinks they had, although, according to report nobody was intoxicated, the stronger became the language until somebody suggested that they should combine and force the d—n selling agents to hold for better prices. With great enthusiasm they organized the Southern Cotton Spinners' Association and elected Col. J. T. Anthony, at that time president of a small yarn mill, as president.

It was about ten years later that they admitted weavers and changed the name to the American Cotton Manufacturers' Association.

Will Heath enjoyed talking about the old days and events connected with same, and about ten days ago we sat in the lobby of a hotel at Raleigh, N. C., and were entertained by him for more than an hour.

Mill News Items

WESTMINSTER, S. C.—Oconee Textiles, Inc., of Westminster has been purchased by the Beacon Manufacturing Company of Swannanoa, N. C., and active control was assumed November 25th, it was learned. The price was not disclosed.

HARTSVILLE, S. C.—Federal District Judge J. Lyles Glenn has signed an order authorizing the Hartsville Print and Dye Works, under reorganization proceedings under Section 77-B of the bankruptcy laws, to expend \$34,643 for construction, purchase and installation of machinery.

MAIDEN, N. C.—Plans have been announced by Frank Campbell, A. C. Black and others for opening a new knitting mill here about March 1st. It will be in the Campbell Building, which is now occupied by the Lincoln Knitting Mill, which is to be moved into the Harrelson Building in East Maiden. Machinery for the new plant has already been bought.

SUMTER, S. C.—Character Spreads, Inc., of this city, has been granted a charter by W. P. Blackwell, Secretary of State, to manufacture and sell candlewick bedspreads, mats and other fabricated textile products, with a capitalization of \$10,000. The officers are: R. M. Warren, president; H. F. Jones, vice-president, and G. C. Warren, secretary and treasurer.

ANDERSON, S. C.—At the Gossett Mills here work is well under way on the construction of additional space for the executive offices at a cost of approximately \$14,000. The enlargement will make available additional space for the clerical department of the mill, as well as providing a room for the directors.

NASHVILLE, TENN.—The Washington Manufacturing Company has purchased machinery and has leased the building from the Sain Manufacturing Company plants, according to reliable reports here.

Washington will make pants in the new plant, and is said to contemplate a material increase in production.

ETOWAH, TENN.—The Delena Spinning Mills, which have been idle for some time, will resume operations within the next few days. Some time ago the Prendergast Cotton Mills and the Alpha Spinning Mills were purchased by a group of Etowah men and incorporated under the name of the Delena with \$35,000 capitalization. Hoyt Lillard is president of the company. B. E. Biggs is vice-president, Dorsey Lillard is secretary, treasurer and general manager.

MT. HOLLY, N. C.—The annual meeting of the stockholders of the American Yarn and Processing Company was held in their offices last week. Edwin Hutchison, secretary, brought a good report. Old officers were re-elected as follows: C. E. Hutchison, president and treasurer; I. C. Lowe, vice-president; T. H. McKinney, vice-

president and general manager; Edwin Hutchison, secretary, and T. J. Davis, assistant secretary and treasurer. Directors, C. S. Hutchison, I. C. Lowe, T. H. McKinney, R. R. Ray, McAdenville, G. G. Galloway and N. A. Locke, of Charlotte.

FRONT ROYAL, VA.—All objections to the title for the site of the big plant to be erected near Front Royal by the Viscose Corporation have been removed, according to State Senator Aubrey G. Weaver of Warren County, and title insurance has been issued in the sum of \$300,000. Senator Weaver has been representing the company in the negotiations.

After a telephone conversation with officials of the company, Senator Weaver said work on construction of the first unit will start at the earliest moment practicable.

"As a matter of fact," he said, "the company is working on drawings for the plant, and these are not yet complete, which is necessary before letting the contract."

Senator Weaver also said there was some work to be done by the Norfolk & Western Railway in construction of sidings and an overhead bridge connecting the properties of the company, which are located on the east and west sides of the Norfolk & Western a short distance from the Front Royal station and about one mile west of the corporate limits.

He had been given to understand that each unit will employ from 1,200 to 1,500 persons, and when finally completed the plant will employ between 4,000 and 5,000.

DANVILLE, VA.—Stockholders of the Riverside and Dan River Cotton Mills have been called to meet in annual session February 18th, at which time action will be taken on a recommendation of the board of directors that 300,000 shares of new common stock is authorized with a par value of \$25.

This would be in the form of an amendment to the corporation's charter. Such action would require a two-thirds affirmative vote by each class of stockholders.

The proposed amendment provides that, after the payment of all dividends accrued and unpaid on preferred stock, the new common stock may be issued by order of the board, but there must first be issued to the preferred stockholders four shares of the new issue for each share of preferred.

What is left over will then be offered pro rata to the existing common stockholders at a price of not less than \$27.50 per share. As to any new issue not purchased by common stockholders, this might be issued and sold by the board in accordance with provisions of the charter.

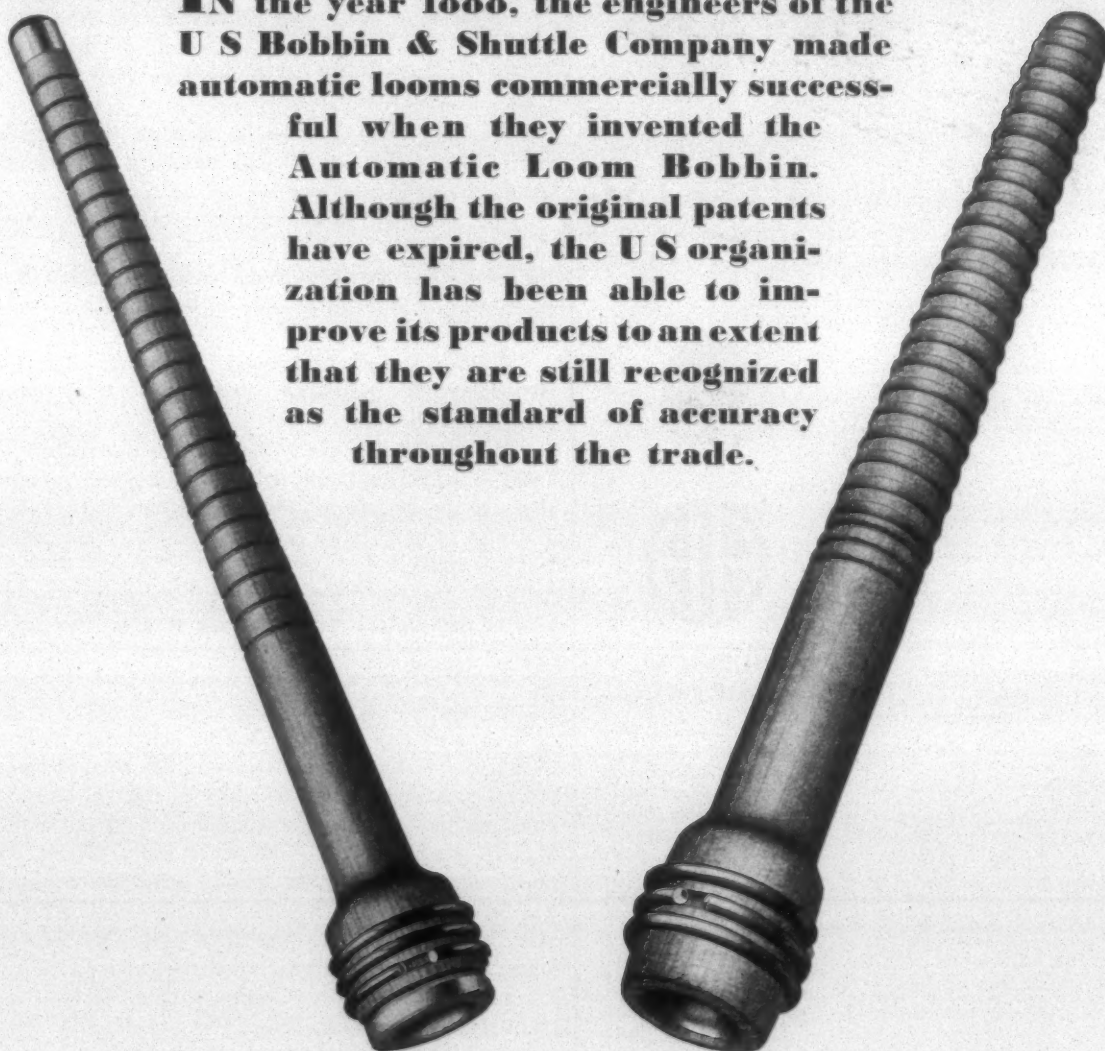
In connection with the notice to shareholders, the company issued its annual report for the year ended December 31, 1936, showing net earnings of \$1,279,066 after all charges, including provision for Federal and State income taxes. This compares with \$188,942 in 1935.

Net sales, including rents, etc., totalled \$24,322,719 against \$19,460,179 in 1935.



We Originated the **AUTOMATIC LOOM BOBBIN**

IN the year 1888, the engineers of the U S Bobbin & Shuttle Company made automatic looms commercially successful when they invented the Automatic Loom Bobbin. Although the original patents have expired, the U S organization has been able to improve its products to an extent that they are still recognized as the standard of accuracy throughout the trade.



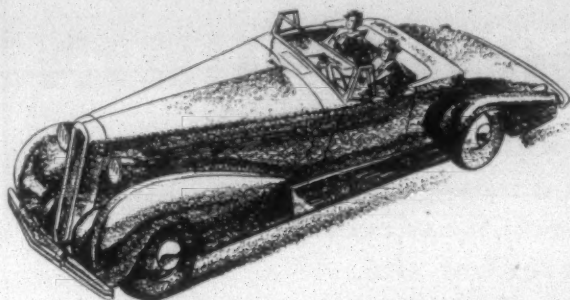
U S BOBBIN & SHUTTLE CO.
MONTICELLO, GEORGIA

Charlotte, N. C., Greenville, S. C., Johnson City, Tenn.

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**It Took
Individual Thinking
140 Years to Produce This**



**COLLECTIVE THINKING
Produced This In Only 27 Years**

By the individual and isolated effort of scores of inventors over a period of about 140 years the automobile by slow stages of development finally reached the point when it was a practical method of transportation. Then the automobile industry discovered COLLECTIVE THINKING and its progress in the 27 years that have followed has been one of the marvels of the age.

Textile finishing can also utilize collective thinking with equally important results. In fact collective thinking is highly essential in textile finishing today because the multiplicity of problems created by new fibres and style changes require a breadth of knowledge and experience that is seldom given to one man or even to one organization. Furthermore, delivery requirements demand prompt solution of these problems.

Collective thinking in connection with sizing, printing and finishing problems is available even to the smallest textile unit through A-H Consultation Service. This service is rendered free of charge by a staff of specially trained chemists assisted by a completely equipped, modern laboratory and a company experience of 122 years.

Write and tell us your problem or ask our nearest representative to call.

Arnold, Hoffman & Co., Inc.

Established 1815—Plant at Dighton, Mass.

PROVIDENCE, R. I.

New York . . Boston . . Philadelphia . . Charlotte



**CHEMICAL
PRODUCTS**

A-H CHEMICALS Sizing and Finishing Gums and Compounds . Soluble Gums . Softeners . Soluble Oils . Tallow . Waxes . Soaps . Flour . Dextrines . Starches . Pigment Colors and Lakes . Ammonia . Acids . Blue Vitriol . Borax . Bichromate of Soda . Bichromate of Potash . Liquid Chlorine . Chlorine of Lime . Caustic Soda (solid or flaked).

High Speed Looms the Product of Extensive Tests

IN reply to a question as to recent improvements in weaving equipment and the economies of these improvements an executive of the Draper Corporation said:

"It is perfectly plain that a loom that runs at 200 picks per minute will weave more cloth than one that runs at 160 picks.

"There is economy in a loom that will take a 22" or a 24" yarn beam in place of the 18" beam used on older looms.

"Modern looms are designed to take a much larger roll of cloth. They are capable of handling the great increase in the number of fabrics due to the introduction of rayon.

"Thus briefly stated, all this seems a very simple thing—merely a matter of design.

"You may be interested in some of the behind-the-scenes doings that were found necessary in producing a successful high speed loom.

"You have read of the proving ground maintained by the large automobile manufacturers to test new devices for their cars. Drivers make continuous runs at high speed and for hour after hour to test endurance on long runs.

"Monotonous for the drivers! Of course. But at least they have the exhilaration that comes from speeding through space.

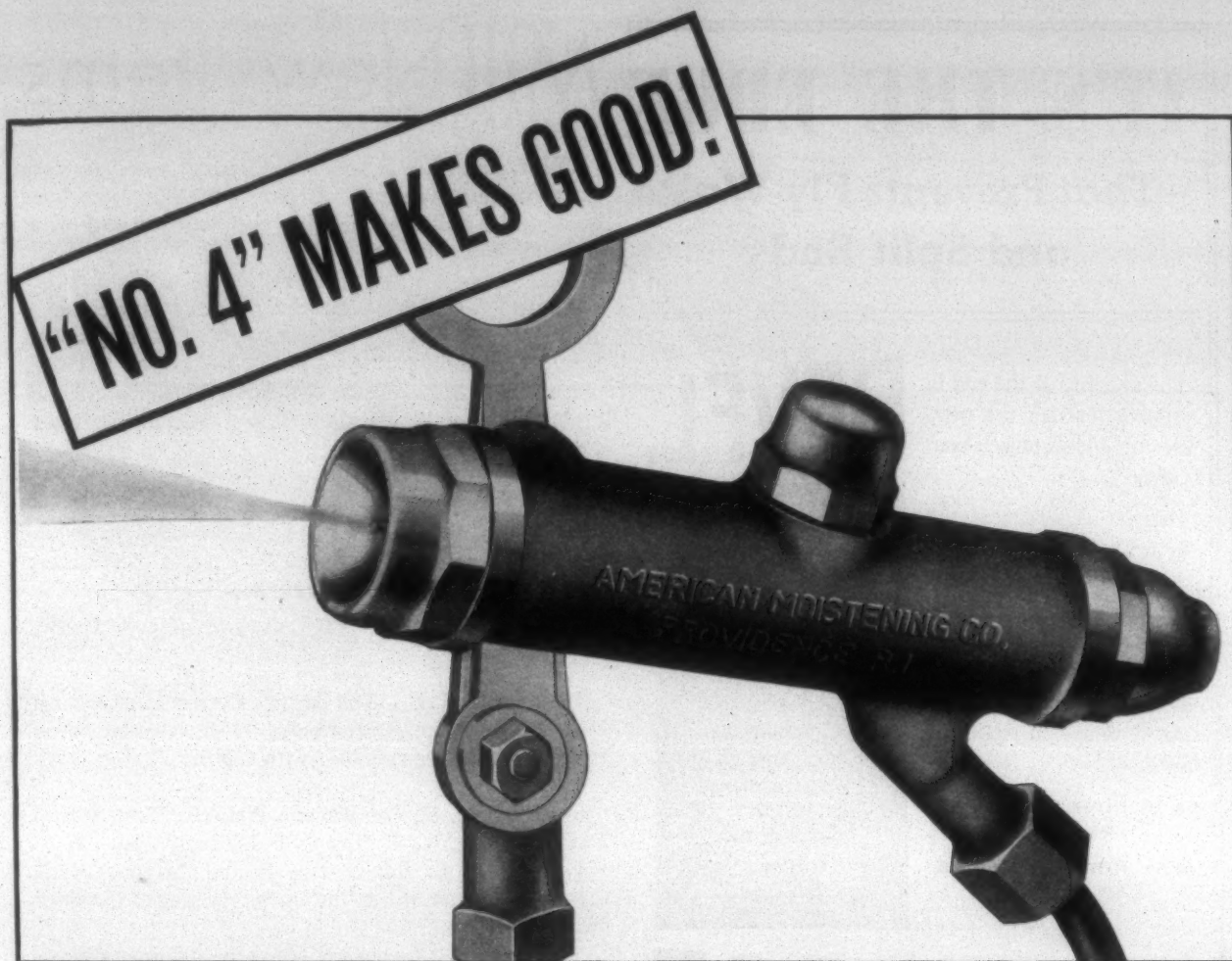
"How would you like to be one of those drivers if instead of making a continuous run you were required to slam on the brakes as soon as you had started the car and had to keep it up until you had made as many as 200,000 starts and stops?

"Well, that sort of thing has been going on at the Draper proving ground during the several years that we have been developing high speed looms to weave plain and fancy cottons and the present-day variety of rayon fabrics woven with one shuttle.

"Day after day men have sat at their looms pulling on the shipper handle and then causing the loom to bang off until they have tested for as many as 200,000 times some vital casting or some new combination of parts in the braking mechanism, the shipper motion, driving parts, shuttle boxes, pick motion or some other mechanism that was being improved. Equally ingenious tests have been made of the amount of wear upon parts that longer life might be secured; and tests calculated to show how friction might be reduced. Shuttles, temples, feelers, thread cutters, stop motions are given new and different tests on the proving ground and the results are built into the better looms now available to the industry.

"The proving ground is one of the means we have used to this end. It is the rock on which we built the high speed looms. To it the industry owes many of the advantages they are now enjoying from these better looms.

"And these better looms are playing their part in the rejuvenation of the textile industry, as we said at the beginning, because a loom made to run at 200 picks is better than one built to run at 160 picks."



AMCO FIRST SELF-CLEANING ATOMIZER SAVING MONEY IN SCORES OF MILLS . . .

The Amco No. 4 Self-Cleaning Atomizer has proved itself an important humidification development. Long past the trial stage, it is saving money in scores of mills where manual cleaning labor was formerly boosting costs. If you are not familiar with its operating principles, here are the quick facts:

Both air and water orifices of the No. 4 are *automatically* cleaned whenever the air supply is shut off by humidity control or manual operation.

The smooth concave surface around the nozzles is kept clean of lint and fly by streamlined currents of induced air.

Drip, or "feathering down", is prevented by an exclusive built-in feature which shuts off water supply when air pressure falls below the proper point for good atomization. Water is not admitted to the nozzle again until air pressure has risen to the proper atomization point.

These pioneered developments by Amco, plus improved construction, make the No. 4 Self-Cleaning Atomizer well worth your investigation, for new work or replacement. Facts on request. American Moistening Company, Providence, R. I. . . . Boston . . . Atlanta . . . Charlotte.

AMCO HUMIDIFICATION

TAKE YOUR HUMIDIFICATION JOB TO A HUMIDIFICATION SPECIALIST

IT'S THE EDGE

**—That Prevents Fly Waste
and Split Ends**

The swirling of the end in passing through the traveler produces smooth even yarn.

This in turn reduces the fly waste to a minimum in the Spinning and Twisting of Cotton, Wool, Worsted, and Asbestos, also reduces the number of split ends in the throwing of Real and Artificial Silks.

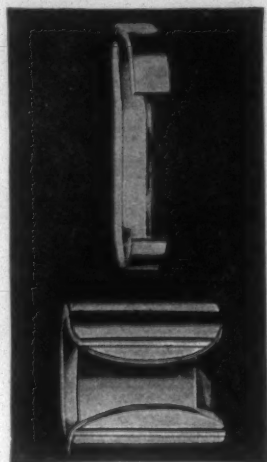
**The Bowen Patented
Bevel Edge**

**The Bowen Patented
Vertical Offset**

and

**The Universal
Standard Ring
Travelers**

BEVEL



EDGE

..... Are the result of combined research and experience in manufacturing Ring Travelers and backed by most modern mechanical equipment. It is to your advantage to try these travelers. Made in all sizes and weights to meet every ring traveler requirement.

Write for Samples

U. S. Ring Traveler Co.

Providence, R. I. Greenville, S. C.

AMOS M. BOWEN, President and Treasurer

Sales Representatives

Wm. P. Vaughan
P. O. Box 792
Greenville, S. C.

T. L. Maynard
P. O. Box 456
Belmont, N. C.

Oliver B. Land
P. O. Box 158
Athens, Ga.

A Traveler for Every Fibre

Mill News Items

CRAWFORD, GA.—Jefferson Mills No. 2 are undergoing extensive improvements. Repairs are being completed on the office building which has been enlarged and painted inside and out.

ELKIN, N. C.—Work was due to start this week on an addition to the Chatham Manufacturing Company's plant here. The addition, it was stated, will permit a 15 per cent increase in production and will accommodate 50 additional workers. The approximate cost of the job is \$30,000.

ROCKINGHAM, N. C.—Entwistle Manufacturing Company reports net income of \$14,250, after all charges, for the fiscal year ended September 30, 1936, as compared with \$789 in the previous fiscal year.

Sales showed an increase from \$1,817,422 to \$2,269,868.

LANCASTER, S. C.—The Springs Cotton Mills has had The Textile Shop, Spartanburg, S. C., re-cover one of their 7-foot slasher cylinders with copper.

STATESVILLE, N. C.—William Wallace, F. A. Sherrill, David J. Craig, W. T. Nicholson, Isidore Wallace, W. C. Sykes and F. B. Bunch were elected directors of the Statesville Cotton Mill at the annual meeting of the stockholders.

The directors subsequently chose the following officers: William Wallace, president; F. A. Sherrill, vice-president; F. B. Bunch, secretary-treasurer; W. C. Sykes, superintendent, and Jack Wallace, attorney.

STATESVILLE, N. C.—At the annual stockholders' meeting of the Paola Cotton Mill, all members of the board of directors were re-elected, as follows: T. C. Fawcett, T. G. Shelton, Mrs. T. G. Shelton, A. L. Mills, L. N. Mills, N. B. Mills and R. L. Poston.

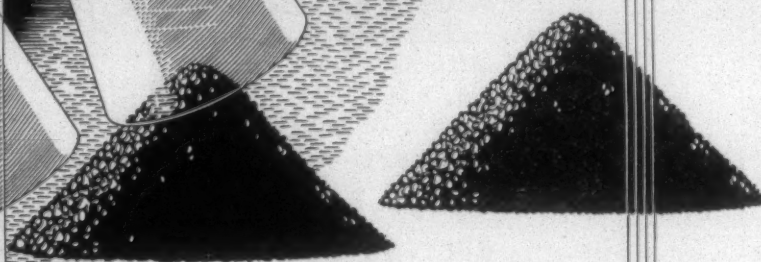
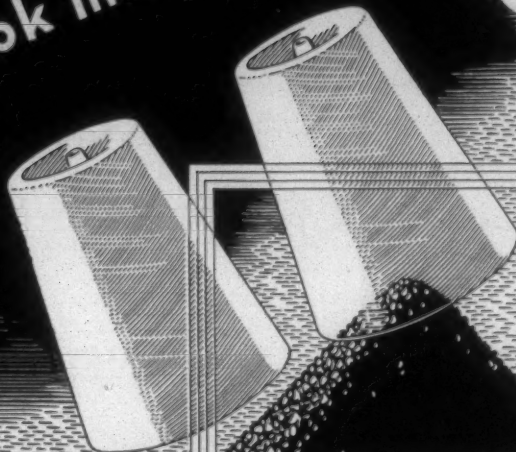
The following officers were re-elected for the coming years: President, N. B. Mills; vice-president, L. N. Mills, and secretary-treasurer, A. L. Mills.

LYNCHBURG, VA.—Henry B. Stimson, official of the Consolidated Textile Corporation, reported to a bankruptcy referee that a report of the January operations of three Southern mills of the firm would be filed in Federal Court February 15th.

The report also will include figures of the first month's operations of the corporation's North Adams, Mass., plant. The company is in reorganization.

Referee Peter B. Olney, Jr., said Jacob Meadow, counsel for a group of bondholders, had informed him progress had been made in settling differences with creditors over an amended reorganization plan. If approved, the plan will be financed, it was stated, by the Mercantile Finance Corporation of Toronto, Canada. A hearing on the plan was adjourned to February 17th. A hearing before Federal Judge Henry W. Goddard is scheduled for February 10th.

One spool of yarn
may look like another
to us!



And one pile of coal
may look like another
to you!

YOU could tell us a lot of interesting things about yarn—and we can tell you some profitable things about coal. For we have devoted years of study to the kinds of coal best suited to the needs of various industries, including your own, and the experiences of our many customers reveal instance after instance of the discovery of extra profits in the coal pile.

The General Coal Company offers the textile industry a coal to fit every purpose and every

analysis requirement. It occupies the unique position of being able to meet a diversity of fuel requirements from a centralized source of supply.

Each General Coal Company brand represents the utmost for a particular field of application—and there is a General Coal office located within a convenient distance of your plant. Communicate with that nearest you for cooperation in securing those "extra profits in the coal pile".



GENERAL COAL COMPANY
PHILADELPHIA, PA.

BOSTON CHARLOTTE, N. C. DETROIT CINCINNATI
NEW YORK PITTSBURGH BUFFALO IRWIN, PA. RICHMOND



GENCO



GENERAL COAL

K R O M O T A N

Increased flexibility for difficult drives. Kromotan is a combination tannage leather belt offering much greater transmission efficiency. Kromotan excels on all difficult drives where the belt is subjected to severe or reverse bends or on idler drives. It is impervious to exceptional atmospheric conditions, such as steam, hot water, dilute acids or alkalis.

CHARLOTTE LEATHER BELTING COMPANY



CHARLOTTE, N. C.

INDUSTRIAL LEATHERS FOR EVERY PURPOSE

ARCY

Gives Maximum Value
To Every Dollars Worth of
Starch



Proper sizing is vital to efficient production and quality of product — and ARCY has been proven the best way to secure superior sizing results with ordinary pearl starch and make every ounce of the least costly starches produce the efficient results you desire.

The ARCY enzyme has characteristic properties not found in any other method of converting or liquefying starch. It does not carry the conversion to sugars and thus does not destroy the desirable properties of starch for warp sizing, but stops at just the right point for maximum sizing value. Ordinary pearl starch from any corn starch manufacturer is converted to the same, uniform size mixture—a thin transparent, slow-congealing size with greater penetrating and binding properties.

Let ARCY help you secure the most value from every dollar's worth of starch and increase the quality and appearance of your product. A trial will convince you.

DRAKE CORPORATION

Norfolk, Virginia

Annual Machinery Increase Figures

(Continued from Page 38)

Knitting
Machines

Texas

McGaugh Hosiery Mills, Dallas	65
Total	65

Virginia

Bassett Knitting Mills, Bassett	3
Bristol Knitting Mills, Bristol	30
Damascus Hosiery Mills, Damascus	34
Galax Knitting Co., Galax	22
Pannill Knitting Co., Martinsville	91
Stillwell Mills, Phoebus	2
Winchester Knitting Mills, Winchester	4
Total	186

Increase By States

Circular K. M.

Alabama	107
Georgia	436
Mississippi	23
North Carolina	2,230
South Carolina	15
Tennessee	1,350
Texas	65
Virginia	186
Total	4,412

Full-Fashioned Knitting Machine Increase

The following tabulations give the name and location of each mill in the South that installed additional full-fashioned knitting machines during 1936, together with the totals by States:

Alabama

Alabama Hosiery Mills, Decatur	28
Total	28

Georgia

*Rogers Hosiery Co., Athens	20
Total	20

North Carolina

Asheville Hosiery Mills, Asheville	4
Knit Products Co., Belmont	6
*A. W. Wheeler & Son, Inc., Brevard	10
Foster Hosiery Mills, Burlington	4
McEwen Knitting Co., Burlington	6
Standard Hosiery Mill, Burlington	11
Tower Hosiery Mills, Burlington	2
*Finer Full-Fashioned Hosiery Mills, Charlotte	4
Nebel Knitting Co., Charlotte	3

*Indicates new mill.

(Continued on Page 53)

FIBRO *and* CROWN SPUN RAYON

IMPORTANT NEW SELLING FACTORS...

Prominent in the world of fabrics today is CROWN SPUN RAYON created from Fibro staple. In two short years the development of Fibro has resulted in a strong new demand...has directed the buying habits of thousands of customers into completely new channels.

In the coming year, the increased production of Fibro, and the development of many new CROWN SPUN RAYON FABRICS will make significant strides ahead in the rayon industry.



PLANTS

Marcus Hook, Pennsylvania

Meadville, Pennsylvania

Parkersburg, West Virginia

Lewistown, Pennsylvania

Roanoke, Virginia

Nitro, West Virginia

SALES OFFICES

New York City

Philadelphia, Pennsylvania

Providence, Rhode Island

Charlotte, North Carolina

Chicago, Illinois

CROWN RAYON

VISCOSE • CUT RAYON STAPLE • ACETATE

The *VISCOSE COMPANY*

World's Largest Producer of Rayon

200 MADISON AVENUE, NEW YORK CITY

Copyright 1937—The Viscose Company

Advantages of Modern Spooling and Warping Equipment

(Continued from Page 28)

continuously from much larger yarn packages. With the type of high speed warper with which subsequent beams may be creeled from the inside while in operation, creeling costs are reduced not only by winding from a larger yarn supply package but tying over is completely eliminated. With the second type of warper, each beam may be of a different yarn number without losing time in changing over.

In most cases warping costs, which necessarily are low, are materially decreased. This is due to a number of reasons. With the lower tension fewer piece-ups by warper tenders are required. The higher speed and improved creeling systems increase the productivity so that a smaller number of warpers are needed to handle a given amount of yarn. Thus a warper tender operates fewer machines and loses less time in starting up the warpers after stops for various reasons.

Worthwhile reduction in spooling costs, which are the major part of the cost in this department, can only be made by enabling the spooler operators to handle an increased number of bobbins per given unit of time. Winding systems which still are dependent on the use of hand knotters, assume to do this by increasing the ease with which the yarn package can be started, easier threading of tension devices and improved organization of the

spooler operators. In some cases the work has been specialized to advantage; that is, one operator using a hand knotter ties the ends which have been previously found by a second operator. This second operator also takes off full packages and puts full bobbins in place.

By far the greatest strides in reducing the work necessary for handling bobbins has been made with the automatic spooler. With this machine the knot is tied, ends on the yarn packages found and slack controlled mechanically, which leaves it necessary for the operator only to find ends on bobbins, place the bobbins in convenient holders and replace full packages with "starters."

Changes in DuPont Rayon Plant

Old Hickory, Tenn.—R. E. Bowland has been appointed DuPont textile area supervisor of Plant 2-B, reporting to the chief supervisor of Plant 2. A. C. Gronberg will assume supervision of Wash and Bleach in addition to 2-A Reels. J. P. Hughes will assume supervision over packing and shipping operations in addition to the inspection operation.

Effective February 15th, D. W. Parks, maintenance supervisor, is being transferred to the Buffalo organization, reporting to R. T. Cann, plant manager. On the same date Karl Frederick will assume the responsibilities carried by Mr. Parks, reporting to C. G. Davis, works engineer.



AMONG THE GREATEST DEVELOPMENTS IN TEXTILE MANUFACTURE...OVER 25 YEARS!

- **MINEROL** is a prepared agent for conditioning textile fibres • a systematic Process of spraying Natural, Dyed or Bleached Raw Stock.
- **MINEROL** helps cards to separate long strands from the short. It saves *good cotton* for the mill.
- **MINEROL** practically eliminates dust and fly • thus it safeguards health and insures better working conditions.
- **MINEROL** prevents STATIC in card rooms, prolongs the life of cards and acts as a rust preventive.

THE BRETON MINEROL PROCESS

Over 20 MILLION SPINDLES are now in operation.

BORNE SCRYMSER COMPANY

ESTABLISHED 1874

Originators of the BRETON MINEROL PROCESS for CONDITIONING COTTON
Mfrs. of the famous "BRETON" OILS for WOOL

17 BATTERY PLACE • NEW YORK



Annual Machinery Increase Figures

(Continued from Page 50)

	Knitting Machines
Okey Hosiery Co., Charlotte	20
Golden Belt Mfg. Co., Durham	5
*Glen Raven Knitting Mills, Glen Raven	12
*Hazel Knitting Mills, Glen Raven	4
Scott Hosiery Mills, Graham	3
Adams-Millis Corp., High Point	7
Diamond Full-Fashioned Hos. Mill, High Point	4
Morganton Full-Fashioned Hosiery Co., Mor- ganton	12
*Biltmore Hosiery Co., Inc., Naple	10
*Alamance Hosiery Co., Reidsville	15
Pilot Full-Fashioned Hosiery Mills, Valdese	12
Waldensian Hosiery Mills, Valdese	8
Total	162

South Carolina

Rogers Hosiery Mills, Laurens	20
Jac Feinberg Hosiery Mill, Rock Hill	10
Excelsior Mills, Union	6
Total	36

Tennessee

Davenport Hosiery Mills, Chattanooga	10
Magnet Mills, Ins., Clinton	5
Massachusetts Knitting Mills, Columbia	25
*James Hosiery Mills, Greenville	15
Niota Mills, Inc., Newport	8
Total	63

Texas

Baker-Moise Hosiery Mills, Dallas	2
Total	2

Virginia

*Kenmore Hosiery Co., Fredericksburg	21
Virginia Maid Hosiery Mills, Pulaski	2
*Wallner Silk Hosiery Mills, Pulaski	32
*Oscar Nebel Hosiery Mills, Staunton	20
*Oscar Nebel Hosiery Mills, Winchester	21
Total	96

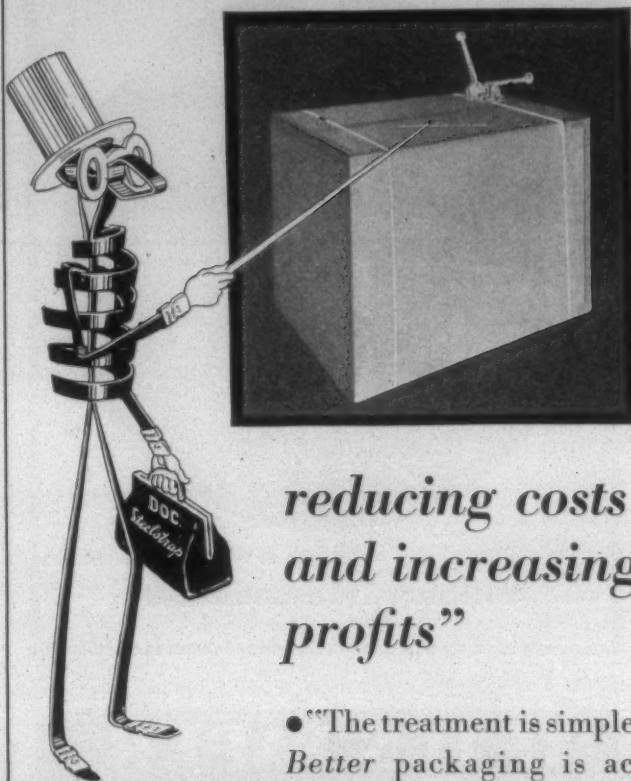
Increase By States

Full-Fashioned K. M.

Alabama	28
Georgia	20
North Carolina	162
South Carolina	36
Tennessee	63
Texas	2
Virginia	96
Total	407

*Indicates new mill.

*"...then Acme Steelstrap
was applied here, thus—*



*reducing costs
and increasing
profits"*

• "The treatment is simple.
Better packaging is ac-
complished in shorter time, at lower cost.

Many Branches of the Textile Industry have used Acme Steelstrap and Bale Ties exclusively for years. Bales, wooden and corrugated boxes are stronger, more compact and 'bound to get there' when Acme Steelstrap and Bale Ties are used.

My *Second Strap Book* is helping many companies effect important economies. Mail the coupon, today, for your FREE copy."

ACME STEEL COMPANY

GENERAL OFFICES: 2827 Archer Avenue
Chicago, Illinois

Branches and Sales Offices in Principal Cities

Acme Steel Company, 2827 Archer Ave., Chicago, Illinois

- ☐ Please send me a copy of "My Second Strap Book."
☐ Without any obligation, please have Doc. Steelstrap
diagnose our case.

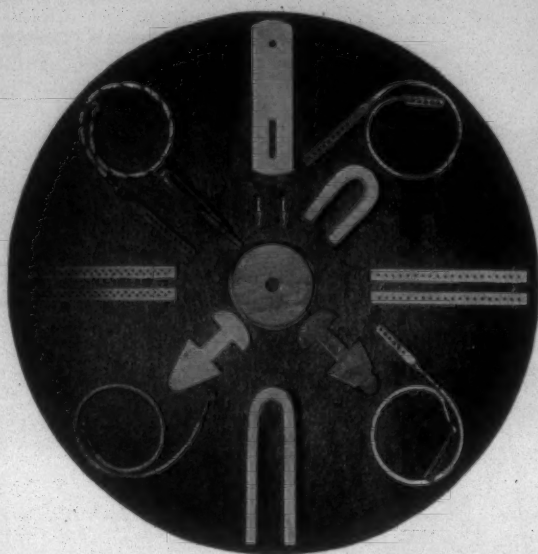
Name

Position

Firm

Address

Rice Dobby Chain Co.



Millbury, Massachusetts

IF IT'S PAPER Send Us Your Order

Cloth Winding Boards
Jacquard Board—Beaming Paper
Toilet Tissues
Twines—Wrapping Paper—Boxes, etc.

DILLARD PAPER CO.

GREENSBORO, N.C. GREENVILLE, S.C.

HOUGHTON STANDARD TOPS

for Rayon and Wool Blends

HOUGHTON WOOL COMPANY

235 Summer St.

Boston

Write or Phone Our Southern Representative

JAMES E. TAYLOR, Phone 3-3692, Charlotte, N.C.

For Fast Action
Use
TEXTILE BULLETIN
Want Ads

Growing Consumer Demand for Label Identification

(Continued from Page 30)

This attitude was taken with some justification insofar as that use of one tag led to multiple tags of varying color on each garment. The tags got tangled. Some torn off one dress were returned incorrectly to another.

Not so justified, however, was the claim of retailers that their sales people were prepared fully to inform customers about the merchandise. Surveys among retailers revealed the fact that sales people were not fully informed. To the contrary, they often made the most sweeping claims simply to close the sale. Retailers discouraged such practices, of course, but more and more executives have come to realize that the easiest way of informing sales people as well as customers is by informative labeling of garments.

Converters of piece goods more readily adopted the idea of identifying service features. This might be attributed to the fact that such information could be included on the end of the bolt board, without extra expenditure for tags. Also, unlike tags, the bolt board was not removed in the receiving room, but went with the merchandise to the retail sales floor.

In the past year, as a result of the readier acceptance of informative labels by stores, ready-to-wear manufacturers have been more alive to the advantages of label identification of garments. This is particularly true of the manufacturers that have trademark lines to promote.

Not only have many of the leaders in the field adopted informative labeling of their merchandise regarding specific features, but they are featuring this fact in their advertising. A significant fact is that the largest outstanding concerns in the market have been among the first to adopt this plan.

In some instances, manufacturers supplement their own label with a secondary label identifying specific qualities. As an instance in point, several leaders have adopted a special label carrying in addition to their regular merchandising information the phrase, "Sanforized-shrunk—Buy Your Correct Size." And this is the type of sales producing information that stores permit to remain on the merchandise. It supports the efforts of the sales person in making the sale.

As a means of identification, the hang tag and the label compete for favor. Hang tags still are removed in some receiving rooms, and they run the added hazard of getting detached from the original garment on the sales floor. But the fact remains that such a tag serves as a powerful silent salesman because it has sufficient space to tell a full and completely informative story.

The mortality of sewn-in labels in the receiving room is not so great as that of tags. On the other hand, it is indeed difficult to design such a label to tell an informative story in its limited space.

Always, in informative identification, it is important that tag or label carries information rather than just a brand name. Good Housekeeping Institute made a survey among homemakers to ascertain what they wanted to aid them in buying more intelligently. Overwhelmingly the request came for specific information on the garment. Moreover, women wanted to know "Will it fade, shrink, dry clean?" rather than technical specifications of fibre

content, pick, weight and such information.

Most significant development of recent date is that Women's Clubs throughout the country are directing their efforts to insure more informative labeling. A letter written by the Federation of New York Women's Clubs to Federal Trade Commission urging better identification of merchandise is one instance of steps which Mrs. Consumer is taking.

Alert retailers are acting upon this trend, too. One important style leader store in the Middle West is busy now preparing an informative label of an institutional character for identifying in twenty or more different departments that merchandise which is sanforized-shrunk.

International Silk Guild is sponsoring an advertising program to the retailer pointing out the need for more extensive use of informative labeling on textiles.

Marshall Field & Co., in recent weeks, has announced a far-flung program for informatively labeling its merchandise, all of which would be identified with a family, brand name.

Thinks Textile Mission Has Made Step in Right Direction

Boston, Mass.—“The reports on the agreement reached by the textile mission to Japan are not sufficiently clear

or detailed to determine the effect on the Japanese threat to business and employment in the cotton textile industry,” says Russell T. Fisher, president of the National Association of Cotton Manufacturers.

“That an unofficial agreement has been reached is eloquent testimony to the ability of Dr. Murchison and the other members of his committee and a step in the right direction,” declares Mr. Fisher in his statement. “The objective of the industry is to remove or at least reduce the threat of these low cost cotton goods imports from the Orient. Any agreement that will lessen the threat of unemployment and losses due to coolie wage scales is a start in the right direction.

“It is understood that the word ‘Betchin’ used in the press dispatches refers to velveteens and corduroys. These fabrics were apparently excepted for separate negotiations based on testimony introduced at the recent hearings before the Tariff Commission.

“There apparently remains the problem of checking the growing tide of coolie-made imports of table cloths, bedspreads and other cotton products. Remedial action must be taken to protect employment and business in these lines. The extremely low Japanese wage scale of a few cents a day for a seven-day week remains a definite threat in many lines.”

GREENSBORO LOOM REED CO.

Manufacturers of

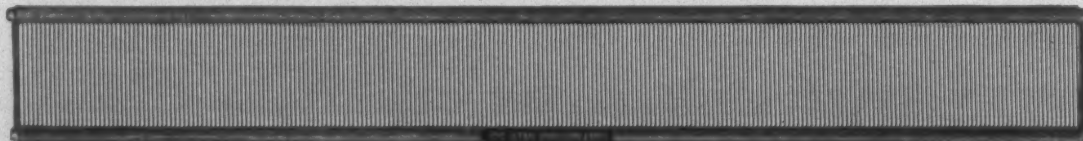
“PRECISION” Rib Pitch type reeds

The reed with most accurate rib on the market (patent applied for)

All-Metal Silk & Rayon Reeds

furnished with or without round metal tube ribs

Warp Drawing-in Combs equipped with our special metal tube ribs



SPRING and POSTIVE EXPANSION COMBS

for Warpers, Beamers and Slashers

CHROMIUM PLATING

of shuttle tensions for silk shuttles, drop eyes for warper creels, feeler tips, warper reeds, front reeds, broad silk reeds, etc.

Phone 5071

Greensboro, N. C. P.O. Box 1375

Twelfth **SOUTHERN TEXTILE EXPOSITION**

◆
**TEXTILE HALL
GREENVILLE, S. C.
APRIL 5 TO 10**
◆

THE latest inventions and designs in modern machinery, installations, accessories, and supplies will be shown by the leading manufacturers of America.

Everything that is new to reduce cost, improve production, and increase out-put may be seen.

From Greensboro on the north, and Atlanta on the south, there will be nightly railway Pullman service. These cars will be parked in Greenville the following day, and returned at midnight.

Please write for room reservations. All visitors may obtain comfortable quarters.

TEXTILE HALL CORP.

Mill News Items

MONROE, GA.—Monroe Cotton Mills are replacing 11,000 spindles with Whitin long draft.

GAFFNEY, S. C.—The Gaffney Manufacturing Company has had The Textile Shop, Spartanburg, S. C., line their size kettles and size vats with copper.

LINDALE, GA.—Pepperell Manufacturing Company declared the regular semi-annual dividend of \$3, payable February 15th to stock of record February 12th.

ANDERSON, S. C.—Beginning February 8th Orr Cotton Mills inaugurated a system of three daily shifts of eight hours each, thus stepping up production at the large plant to meet the increasing demand for its products.

The mill has been operated on a system of two daily shifts, and the additional shift will afford employment for approximately 400 additional people.

ELLENBORO, N. C.—The Ellenboro Manufacturing Company's plant has been sold and its name changed to Queen Anne Mills Company.

Belk Bros., of Charlotte, owners of the mill since it was organized some years ago, sold it recently to a corporation which has an authorized capital stock of \$100,000. Incorporators are W. E. Mason, of Greenville, S. C., R. C. McCall, of Liberty, N. C., and Richard E. Thigpen, of Charlotte, N. C.

The mill will manufacture cloths and textile fabrics.

NORFOLK, VA.—Aberfoyle, Inc., a subsidiary of the Aberfoyle Manufacturing Company, Chester, Pa., will be located here, it is made known by Edwin Lord, vice-president and general manager.

The new Norfolk mill will engage in throwing, warping and weaving. Machinery and air conditioning will be installed in the plant formerly known as the Norfolk Weavers, at 40th street and Killam avenue.

The building will be renovated and will provide a floor area of about 80,000 square feet. It now has about 40,000 square feet.

Operations of the new mill are scheduled to get under way in the spring. In anticipation of enlarged manufacturing activities here later, Aberfoyle has been negotiating for adjacent vacant land. Renovation of the present structure will begin at once.

When operations of the mill are to be started, expert key men will be brought to Norfolk, from Chester, and the other labor, to number from 150 to 200 at first, will be hired locally.

The Norfolk subsidiary of Aberfoyle will have a capital stock of \$1,000,000, of which \$750,000 will be common and \$250,000 preferred. The Aberfoyle Manufacturing Company will own all the common stock, and the preferred stock will be owned by Norfolk interests.

The parent organization has plants in Chester, Guelph, Ontario, Canada; Melbourne, Australia and Belmont, N. C. Charles E. Lord, of New York, is president.

Mill News Items

ASHVILLE, N. C.—New equipment is being installed by Sayles Biltmore Bleacheries here at a cost of between \$25,000 and \$30,000. The number of employees was increased by about 15 per cent last year, bringing the total to 500.

CHESNEE, S. C.—The taking over of Chesnee Mills by Saxon Mills was completed February 2nd, it was learned from John A. Law, president and treasurer of Saxon Mills.

As heretofore, each mill will be run as a separate unit, the only difference, in so far as operations are concerned, being that the Chesnee plant will be known as the "Chesnee division" of Saxon Mills instead of being called Chesnee Mills, Mr. Law said.

The Chesnee Mill Corporation is being dissolved and its charter cancelled.

As rapidly as they can be prepared, new certificates of stock in Saxon Mills will be mailed to former Chesnee stockholders, Mr. Law added.

There will be no changes in the personnel of the plants, he said.

Stockholders of Saxon and of Chesnee Mills authorized the taking over of Chesnee Mills by Saxon Mills at meetings here in the early part of December. It was the completion of this step which was announced by Mr. Law.

GAFFNEY, S. C.—Receivers of the American State Bank sold at auction one lot of judgments and several blocks of mill stocks. Twenty-four shares of Hamrick Mills stock sold for \$37.50 per share, and 115 shares of Musgrove, offered in blocks, ranged from \$10 to \$10.10 per share.

BELMONT, N. C.—The annual stockholders' meeting of the Eagle Yarn Mills, Inc., brought forth a good report from Secretary J. W. Stowe. A 6 per cent dividend was paid during the last year, and optimism was expressed as to improved business.

The officers and directors were re-elected as follows: W. B. Puett, president; S. P. Stowe, vice-president; J. W. Stowe, secretary and treasurer. In addition to these officers the other directors are R. L. Stowe, A. C. Lineberger, F. P. Hall and J. M. Scott.

The officers and directors of the Stowe Spinning Company were re-elected at the annual meeting of the stockholders. S. P. Stowe is president and R. L. Stowe is secretary-treasurer. A good showing was reported for the past year with dividends paid. Prospects of good business for the coming year were held bright.

The out-of-town stockholders here for the meeting were: Dr. J. P. Monroe, John M. Scott, J. M. Harry, W. W. Hagood, J. P. Hackney, W. Z. Stultz, J. J. Wooten, all of Charlotte; Caldwell Ragan, J. B. Caldwell, Cramerton; F. L. Jackson and Dr. Douglas, of Davidson.



Staley's



Textile Starches

CONTRIBUTE TO GENERAL MILL EFFICIENCY
AND PROFITS. THERE IS AN EXACT GRADE
FOR EVERY PURPOSE.

STALEY'S COOPERATION AND SERVICE
ARE USEFUL TO YOU IN ANY KIND OF AN
EMERGENCY

A. E. Staley Manufacturing
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Hungarian Chemists Develop New Fiber

Two Hungarian scientists, Dr. Joseph Benko and Stefan Csaszar, have succeeded in cultivating a variety of mulberry trees which provides fibres which are particularly suited for textile purposes. After removal of the bark from the young plants the fibres obtained are treated in cold and hot caustic soda, acid and salt liquors. The final fibres are white, have an attractive lustre, and a soft handle. The elementary thread has a length of 4 to 5 cm., and a tensile strength of 36 kgs.

Wears Woolen Suit Made On His Farm

Asheboro, N. C.—Amos E. Brady, of Coleridge, was in Asheboro recently wearing a new handmade woolen suit, made of wool grown on his farm. The thread was spun and woven on an old-fashioned hand loom. The cloth was colored before the material was cut. All this was fashioned by Mrs. Brady, who is hale and hearty at the age of 89 years.

Index To Advertisers

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

	Page		Page
—A—		Johnson, Chas. B.	61
Abbott Machine Co.	—	Jacobs, E. H. Mfg. Co., Inc.	—
Acme Steel Co.	53	—K—	
Akron Belting Co.	—	Keever Starch Co.	63
Allis-Chalmers Mfg. Co.	23	—L—	
American Blower Corp.	—	Laurel Soap Mfg. Co., Inc.	—
American Bobbin Co.	65	Link-Belt Co.	—
American Cyanamid & Chemical Corp.	27	—M—	
American Moistening Co.	47	Maguire, John P. & Co.	71
American Paper Tube Co.	—	Marshall & Williams Mfg. Co.	—
Armstrong Cork Products Co.	6	Marrow Machine Co., The	—
Arnold, Hoffman & Co., Inc.	46	Murray Laboratory	—
Ashworth Bros.	41	—N—	
—B—		National Aniline & Chemical Co., Inc.	—
Bahson Co.	—	National Oil Products Co.	—
Bally, Joshua L. & Co.	70	National Ring Traveler Co.	60
Bancroft Belting Co.	—	Nelsler Mills Co., Inc.	—
Barber-Colman Co.	—	N. Y. & N. J. Lubricant Co.	—
Borne, Scrymser Co.	52	Noone, Wm. R. & Co.	Center Insert
Brookmire, Inc.	78	Norland Machine Co.	—
Brown, David Co.	—	Norma-Hoffmann Bearings Corp.	39
Brown, D. P. & Co.	—	—O—	
Bruce & Co., E. L.	—	Old Dominion Box Co., Inc.	77
—C—		Onyx Oil & Chemical Co.	—
Campbell, John & Co.	—	—P—	
Carolina Drilling & Equipment Co.	58	Parks-Cramer Co.	—
Carolina Refractories Co.	—	Perkins, B. F. & Son, Inc.	—
Charlotte Chemical Laboratories, Inc.	—	Piedmont Supply Co.	58
Charlotte Leather Belting Co.	50	Powers Regulator Co.	—
Ciba Co., Inc.	—	Provident Life & Accident Ins. Co.	Back Cover
Clark Publishing Co.	—	—R—	
Clinton Co.	Front Cover	Rhoads, J. E. & Sons	—
Crespi, Baker & Co.	—	R. I. Warp Stop Equipment Co.	83
Crompton & Knowles Loom Works	—	Rice Dobby Chain Co.	54
Curran & Barry	70	Roy, B. S. & Son Co.	78
Cutler, Roger W.	19	—S—	
—D—		Saco-Lowell Shops	5
Dary Ring Traveler Co.	—	Seydel Chemical Co.	—
Daughtry Sheet Metal Co.	58	Seydel-Woolley Co.	—
Deering, Milliken & Co., Inc.	70	Sherwin-Williams Co.	77
Denison Mfg. Co.	65	Signode Steel Strapping Co.	—
DeWitt Hotels	—	Sipp-Eastwood Corp.	—
Dillard Paper Co.	54	Socony Vacuum Oil Co.	—
Dixon Lubricating Saddle Co.	—	Soluol Corp.	—
Drake Corp.	50	Solvay Sales Corp.	—
Draper Corporation	—	Sonoco Products	—
Dronsfield Bros.	—	Southern Ry.	—
Dunkel & Co., Paul R.	74	Southern Spindle & Flyer Co.	—
Dunning & Bochert Press Co.	60	Staley Sales Corp.	57
DuPont de Nemours, E. I. & Co.	15	Stanley Works	—
—E—		Steel Heddle Mfg. Co.	37
Eaton, Paul B.	74	Stein, Hall & Co.	33
Emmons Loom Harness Co.	—	Sterling Ring Traveler Co.	—
Engineering Sales Co.	—	Stevens, J. F. & Co., Inc.	70
Enka, American	4	Stewart Iron Works Co.	—
—F—		Stonhard Co.	40
Foster Machine Co.	Center Insert	—T—	
Benjamin Franklin Hotel	—	Terrell Machine Co.	—
Franklin Machine Co.	—	Texas Co., The	2
Franklin Process Co.	Center Insert	Textile-Finishing Machinery Co.	Center Insert
—G—		Textile Hall Corp.	56
Garland Mfg. Co.	—	Textile Shop, The	—
General Coal Co.	49	—U—	
General Dyestuff Corp.	25	U. S. Bobbin & Shuttle Co.	45
General Electric Co.	—	U. S. Gutta Percha Paint Co.	—
General Electric Vapor Lamp Co.	35	U. S. Ring Traveler Co.	48
Gilmer Co., L. H.	—	Universal Winding Co.	13
Goodyear Tire & Rubber Co.	3	—V—	
Grasselt Chemical Co., The	—	Vanderbilt Hotel	75
Graton & Knight Co.	—	Veeder-Root, Inc.	—
Greensboro Loom Reed Co.	55	Victor Ring Traveler Co.	65
Greenville Belting Co.	—	Viscose Co.	51
Gulf Refining Co.	—	Vogel, Joseph A. Co.	69
—H—		—W—	
H & B American Machine Co.	17	Wellington, Sears Co.	20
Hercules Powder Co.	31	Whitin Machine Works	21
Hermas Machine Co.	75	Whitinsville Spinning Ring Co.	59
Holbrook Rawhide Co.	65	Williams, I. B. & Sons	29
Houghton, E. F. & Co.	—	Windle & Co., J. H.	—
Houghton Wool Co.	54	Wolf, Jacques & Co.	—
Howard Bros. Mfg. Co.	—	Wytheville Woolen Mills	—
—J—			
Jackson Lumber Co.	—		

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Work supervised by Registered Engineer

We have drilled wells and installed water systems for some of the South's best known textile plants and municipalities. Names on request. Survey of your particular problem and estimate gladly furnished without obligation.

CAROLINA DRILLING & EQUIPMENT CO.

Sanford, N. C.

Modern Machines and Methods Establish New Standards in Production and Economy

(Continued from Page 26)

considerable power, and consumes a great deal of time. With the new Saco-Lowell Controlled Draft Roving system it is possible to make as high as 9 hank in one passage.

The result of this innovation has been a very favorable one for mills, because it has enabled them to control their manufacturing cost in the face of a rising commodity scale and has in many cases been the means of turning manufacturing at cost to manufacturing with a satisfactory profit.

SPINNING

The Saco-Lowell Roth Model 32 spinning frame is found extremely satisfactory on all classes and counts of yarn. At the present time there are over four million spindles of this spinning in the United States alone.

While this system retains the conventional three rolls so long found satisfactory, it has supplemented their action by means of an apron, whose function is the transportation of the roving after the twist has been removed by the break draft to a control unit which feeds the fibres uniformly and without disturbance on the front roll.

The essential feature of this system, that which differentiates it from all other long draft systems is the leather apron, whose function is merely the transportation of the fibre and the control roll which exercises the necessary restraint during the final drafting.

The action of this unit is not effected by the state or condition of the belt, or the humidity of the room. A belt which has run 5,000 hours will function with the same degree of satisfaction as a new belt.

Furthermore, this system is universal in that it is built with a standard setting adapted to all staple lengths ranging from the shortest commercial bales of cotton up to 1 9/16.

The new drawing, roving and spinning processes taken as a unit will set a new high standard of production and low standard of cost which the mill equipped with old machinery can not hope to attain.

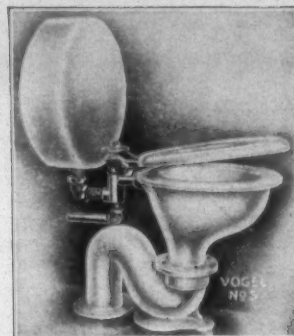
New Box Truck Offered By Stackbin Corp.

Users of stainless steel trucks for handling wet or delicate textile fabrics will be interested in the new Stackbin Box Truck, said to sell for one-half the price of the ordinary stainless steel truck. The manufacturer claims it can't stain or tear fabrics. It has a smooth one-piece welded interior, is easily washed, and has a sturdy channel steel chassis.

The new inverted bottom, welded sides, and rolled welded edges eliminate all interior bolts or rivets, leaving smooth edges and corners over which material can be pulled without danger. The unique inverted bottom construction provides drainage around the edges, saving the labor of "up-ending" the truck after washing. The chassis will carry the entire weight, and special caster design makes handling easier.

The Stackbin Corporation of Providence, R. I., make this truck in any size and for any weight to meet special requirements.

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AND FEWER
REPAIRS !**

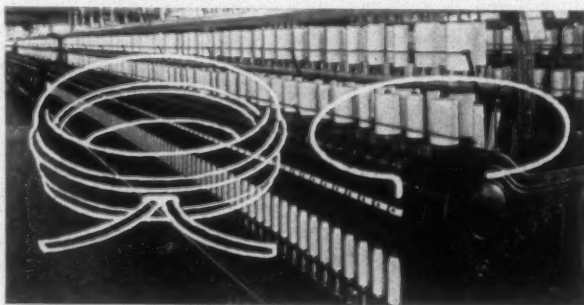


VOGEL Number Five Closets, due to their efficient and economical operation, are being installed in mills and factories all over the country. Furthermore, by use of the **VOGEL** Number One Valve, this outfit can be made semi frost-proof. This permits fires to be banked over week-ends or for days at a time without danger of freezing.

Sold by plumbers everywhere

JOSEPH A. VOGEL COMPANY
Wilmington, Del.
St. Louis, Mo.

VOGEL PATENTED **Products**



**25% more wool spun
25% more cotton twisted**

Cotton mills are getting 20% to 30% greater production from their twistors after installing **DIAMOND FINISH** Eadie auto-lubricated rings. Woolen mills experience equal results on their spinning. The average user cuts the labor and overhead cost a good, solid 20%. Larger packages, less fly. Investigate!

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WENTWORTH

Double Duty Travelers

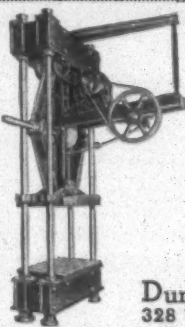
Last Longer, Make Stronger Yarn, Run Clear, Preserve the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE.

Manufactured only by the
National Ring Traveler Co.

Providence, R. I.

31 W. First Street, Charlotte, N. C.

Reg. U. S. P. O.



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Equipment For Sale

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through a

Textile Bulletin

WANT AD

H & B American Machine Company Has Revamped Plant; Increased Personnel

(Continued from Page 22)

gree of efficiency. This machine will draft over 20 and is provided with a special folder arrangement, simple in design, and in its operation requires practically no attention. H & B American Machine Company have recently taken over the Harris Patents and will soon have on the market an entirely new design of Roving Frame to produce 10 hank or finer roving direct from sliver, providing whatever drafts may be required. This machine is of an entirely new design throughout, including flyers and doffing arrangement. It will operate at a speed of approximately 2100 r.p.m. of the spindle.

H & B American Machine Company have recently developed a New Rubber Covering Machine and have already done a considerable amount of business in this line. This machine has proved highly satisfactory and of great interest in various lines which had heretofore been unable to procure a similar type of machine.

An extensive program has been inaugurated which has provided a large amount of money to be spent to entirely revamp our shop and foundry, installing the latest equipment, tools and methods. H & B American Machine Company are desirous of placing their factory in an enviable position, equipped with automatic and precision machinery of the very latest design. We have just installed a new machine for cleaning castings in our foundry at a cost of nearly \$7,000. Old molding machines are being replaced with the latest type, and patterns are being changed to adapt them to the new machines. This will not only reduce cost but will also improve the quality of the castings produced.

New milling machines have been installed in our Milling Department, both the Cincinnati and Brown & Sharpe types. These machines improve the quality and accuracy of the work, as well as increase the production. In our Drill Department new High Speed Allen Drills and Jarvis High Speed Tapping Chucks have been provided. Many of our machines have been relocated to facilitate production.

In the lathe Department H & B American Machine Company have installed 14 New Potter & Johnston Automatic Machines equipped with the very best tooling that can be provided. Production in this department has been increased approximately 40 per cent. Thread cutting and tapping on our automatics has been greatly improved by equipping these machines with the latest type of die heads and high speed tapping fixtures. These have not only increased production but also improved the quality of the work. Special screws 12" long, 1" diameter, having a 10-pitch thread, will now be cut in less than two minutes. Several new centerless grinders have been added and by means of various types of steels we are able to increase production and improve the quality of our work.

In our Spinning and Twister Ring Department we have developed a new process of hardening, rounding and polishing of rings, and by the installation of new electric polishing heads and special buffing machines we have increased production 30 per cent and improved our rings to such an extent that the demand for them has been tre-

mendously increased. Special side-grinding machines and testing machines have also been installed and a new system of inspection developed.

In our Fluted Roll Department machines have been relocated, special equipment added, and new Cincinnati Centerless Grinders installed. This will insure more accurate work. New precision tools have been provided for gauging. Our Tin Shop has been provided with New Niagara Bending Machines, special equipment for assembling tin cylinders, and new high speed balancing lathes. New machines and special fixtures have been provided for the milling of spindle rails and roller beams; also high speed tapping and boring attachments have been provided in this department.

In our Thread Board Department the installation of new disc cut-off wheels has increased production over 30 per cent. New 35-ton Bliss Presses for multiple die work, and smaller presses with automatic feeds have also been purchased. New circular saws, high speed drills, and other accessories have been provided for our Pattern Shop, which we feel is today a model for any concern.

In the Carpenter Shop we have installed special clearer machines, cutting machines, special sanding machines, and riveting machines; and this has enabled this department to produce work of exceptional quality at a high rate of speed.

All of our Erecting Departments are now equipped with special jigs and gauges to insure accurate work. Our

inspection system has been revamped and a complete set of special instruments provided to increase production and insure accuracy.

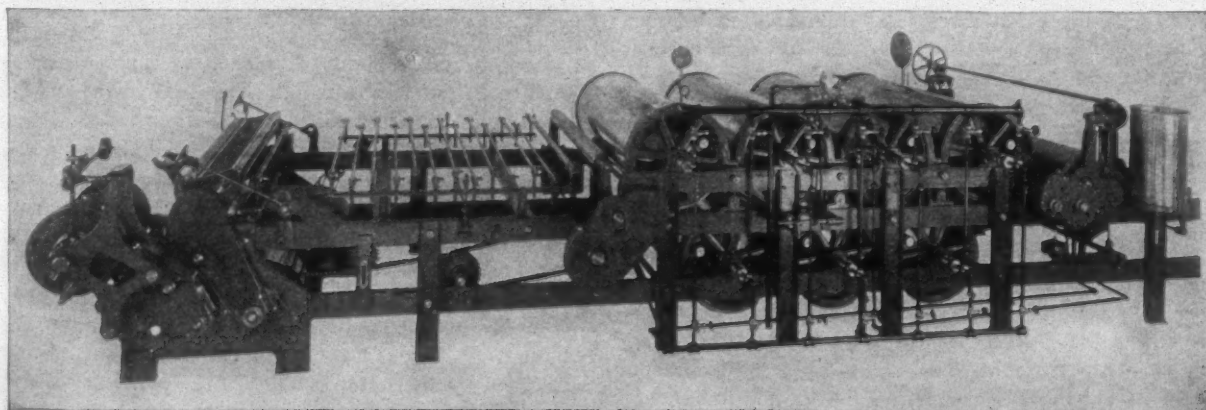
The foregoing is only an outline of the program which is being carried out but serves to illustrate the fact that H & B American Machine Company practice what they preach in advertising that all mills should modernize.

Georgia Association Selects Meeting Dates

At a meeting of the Executive Board held in Atlanta on January 26th, it was decided to hold the thirty-seventh annual convention of the Cotton Manufacturers' Association of Georgia at the Cloister Hotel, Sea Island Beach, Ga., June 3-4, 1937, it was announced by T. M. Forbes, Secretary. These particular dates were selected in order to avoid conflict with other textile association meetings.

Dean Willis To Speak

The Textile Industrial Institute of Spartanburg, S. C., is offering a series of lectures on Vocations. On February 13th, Dean H. H. Willis, of Clemson Textile School, will speak to these students on the textile phase of this subject.



SIZE WARPS BY EITHER SILK OR COTTON SYSTEM

SPEED AND QUALITY are essential in today's competitive market. The new Johnson seven cylinder sizer gives approximately 40% more production and enhances quality by drying at lower temperatures. And in addition, for mills that are comparing the advantages of silk and cotton systems, this sizer has a combination end, by which the same machine can be used for sizing warps made on either the silk or cotton system.

Write for full particulars

CHARLES B. JOHNSON, PATERSON, NEW JERSEY, U. S. A.

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The Value of Scientific Research To Textile Manufacturing

(Continued from Page 14)

as by manufacturers of these products to develop their utilization along scientific lines. With but a few notable and encouraging exceptions, however, the industry is running true to its historic form.

AN EXAMPLE OF CO-OPERATIVE EFFORT

Manufacturers engaged in chemical processing of textiles, most of whom have trained chemists and laboratory facilities and operate on scientific lines, are scarcely less interested than the manufacturers of synthetic resins in developing their possibilities for textile use. Expensive experimental and developmental researches are conducted, and special equipment is installed when required. It is of particular interest in this connection to credit Tootal, Broadhurst, Lee & Co., English textile manufacturers, with having been the first to develop successfully the crease-resistant process by impregnation with synthetic resins. The process controlled by them is used by a number of domestic finishers. The English company is reported to have spent over a million dollars in developing it to a successful basis.

Of hundreds of synthetic resins very few have as yet been found or made adaptable for textile impregnation. This branch of the chemical industry is comparatively new and further progress is dependent upon difficult scientific research. It faces certain difficulties in the solution of its fibre impregnation, or modification, problems that are not dissimilar to those of the dye chemist; that is, to the extent that resin impregnation depends upon fibre penetration, to that extent the resin chemist as well as the dye chemist must depend for repetitive results upon scientifically controlled conditions. The dye chemist does not yet know just how or why a dye dyes. The theory of fibre modification by impregnation with synthetic resins is also shrouded in much mystery. The solution of these problems probably depends as much upon more exact scientific knowledge of the physical and chemical properties of fibres as of the materials used in dyeing and in resin impregnation. This interdependence of research on fibre properties and of research on the materials used in fibre processing is vital in the development of new yarns, fabrics and finishes. It is equally important that there should be collaboration between scientists and technicians skilled in both fields of knowledge if the industry is to secure maximum benefits from these new synthetic resins. We can be confident that the solution of these complicated problems, and the development of many new methods of textile impregnation with synthetic resins will be as rapid as is scientifically possible, for they are the problems of branches of the textile industry and of the chemical industry which are "sold" on scientific research.

RAYON FIBRE SPINNING A NON-SCIENTIFIC EXAMPLE

Contrasting diametrically with the attitude of the chemical processing branch of the textile industry toward scientific methods, scientific research, and specifically toward such innovations as the synthetic resins, is that of a majority of spinners toward rayon fibre, or, as it is

commonly termed, cut rayon staple fibre. There are some exceptions to this general statement, but those spinners who have approached the utilization of rayon fibre scientifically are about as few in number as are the dyers and finishers who do not operate upon a scientific basis. That rayon fibre is a product of scientific research of the most fundamental character, and that already it has demonstrated its practical value is universally recognized. That its properties, as well as those of filament rayon, will be greatly improved both chemically and physically by scientific research is certain. It is also certain that the industry eventually will be sufficiently interested in exploiting fully the properties of rayon fibre to be willing to equip their mills with machinery that will make this possible. The available properties of most vital importance in spinning, aside from cleanliness and evenness, are any desired fibre length and any requisite denier. Rayon fibre has both. Instead, however, of developing special machinery for rayon fibre spinning that will allow the use of most suitable lengths and deniers for any desired count and type of yarn, the majority of manufacturers have not attacked its utilization as a new problem with new possibilities, but as a new material for use on existing machinery. Many inventive minds, however, have attacked it as a new problem, and it is only a question of time before rayon fibre will be processed generally on special machinery.

The rayon manufacturers have been so busily and profitably employed on yarns that they cannot be blamed for accepting the line of least sales resistance in the marketing of rayon fibre thus far. That they are alive to the possibilities and need of more scientific preparation and spinning of rayon fibre can be seen by reference to patent files of the last few years, and by their interest in the mill tests of the few machines that have thus far been developed for spinning rayon fibre without preliminary cutting. Spinners and weavers are running true to form in allowing the rayon manufacturers to assume the responsibility and bear the expense of this developmental servicing as they have in the case of rayon yarn. We wonder, however, if they realize the logical result of the burden that they are obliging the rayon manufacturers to take over: the production by the latter of rayon fibre yarns as well as of rayon filament yarns.

OTHER FACTORS INFLUENCING TRANSITION

We have said nothing thus far about other factors which have played an important part in the transition of the industry from an empirical to a scientific basis. I refer to the foundations and organizations engaged in research and its promotion, and to the valuable influence of the *Trade Press* in recording the results of research in this and foreign countries, and in ably supporting the efforts of our research organizations. We refer to "foundations," because in addition to the textile research conducted or supported by The Textile Foundation since 1930, The Chemical Foundation is now sponsoring an important basic research on the chemistry of cellulose at the Boyce Thompson Institute for Plant Research, Yonkers, N. Y., and a complementary project at Massa-

chusetts Institute of Technology designed to prepare graduates for cellulose research.

Second only to the practical results and practical example of scientific research of the synthetic and textile chemical industries, in awakening textile manufacturers to the value of scientific methods, has been the research program of The Textile Foundation and the financial support by the Foundation of researches sponsored by the American Association of Textile Chemists and Colorists and by U. S. Institute for Textile Research. Authorization of the Foundation by Act of Congress in 1930 was most opportune, for, without its leadership and financial support during the depression years that followed, the other two research organizations would have been seriously handicapped. Although no revolutionary discoveries have resulted, nevertheless much valuable new basic textile knowledge has been made available, and avenues to a vast storehouse of fundamentals have been opened for future needed research. Undoubtedly the wide publicity given to the work and findings of these bodies by their publications and the *Trade Press* during depression years found a more receptive audience than would have been the case had manufacturers been profitably employed and less anxious about the future. There is increasing evidence that the seed of science sown in those years of adversity is developing a hardy perennial growth of textile research mindedness.

For the work and accomplishments of these and other bodies which are contributing to the growth of textile science we must refer the reader to the *Trade Press*, also for a complete list of these contributing bodies. They include government departments such as the Bureau of Standards, numerous universities engaged in independent research, non-textile organizations such as Committee D-13 of the American Society for Testing Materials, and some of the textile schools. While the national associations of manufacturers, and such organizations of technicians as The Arkwrights are not engaged in scientific research, they are an important source of

research problems and can be depended upon to endorse practical results of research.

Those who are interested in participating, themselves or through their representatives, in organized textile research will naturally wish membership in either the American Association of Textile Chemists and Colorists or U. S. Institute for Textile Research, or in both, for neither The Textile Foundation nor The Chemical Foundation are membership organizations. The American Association of Textile Chemists and Colorists like The Textile Foundation, engages in all types of research pertaining to textiles, although carefully avoiding chemical studies duplicating projects of the American Association of Textile Chemists and Colorists, or that could be most efficiently handled by that organization. They co-operate actively, and there is considerable duplication of membership. The annual dues for either individuals or corporations are nominal. Both of these organizations, and the foundations as well, have avoided the tying up of funds in laboratory buildings and equipment; instead they make use of such institutional and governmental laboratories as are best qualified for specific studies. Research work in both of the membership organizations is conducted under the sponsorship of committees and sub-committees whose members donate their services.

VALUABLE FREE SERVICE AVAILABLE

In one important detail U. S. Institute for Textile Research differs from the American Association of Textile Chemists and Colorists in its approach to a new project. Decision as to whether or not a new subject justifies organized research and its financing is left to an open conference in which all interested parties, whether or not they are Institute members, are invited by letter and through the *Trade Press* to participate. Two researches now in progress came out of these conferences: that on warp sizing and sizing materials, now starting its third year, and another on textile drying to be in active operation shortly. Both of these studies were co-operatively

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financed, the first jointly by the Institute and The Textile Foundation, and the latter wholly by 50 Institute members at \$100 a year each. Subscribers to these co-operatively financed investigations receive confidential progress reports, and no reports of results are made public until a year after completion of a study. All other U. S. Institute research is public, including the economic study of integrated manufacturing and merchandising now in progress at the Wharton School of Finance and Commerce, and wholly financed by The Textile Foundation.

While results of co-operatively financed researches are not generally available during their progress, the conference papers, discussions and bibliographies are, and are recognized as comprehensive reviews of the state of art. Another free contribution of this organization to the industry, and one which must follow public notice of the scientific investigation of any textile process based upon empirical knowledge and noted for its inefficiency, is explained in the following extract from a recent report of U. S. Institute's warp sizing committee:

"It is in its indirect results that the study has been of the greatest value to co-operators and to the whole industry. We refer to the fact that it has keyed up the manufacturers of sizing materials, machinery, and other supplies to the improving of their products. Not only have higher speed slashers resulted, but many other valuable improvements. Not only have several new synthetic sizing materials made their appearance, but we think it is fair to say that there has been a general improvement in the quality of sizing materials delivered during the past year. Furthermore, manufacturers have been made keenly alive to the possibilities of improving their sizing processes by the mere fact that this study has been deemed worthwhile by so representative an organization and a group of co-operators. Several mills, some of which are not yet financial co-operators in this study, have spent as much or more than we have in research work with satisfactory results, and the general improvement in sizing practice throughout the industry must be credited largely to the existence of this piece of research and the publicity given to it in the *Trade Press*."

INADEQUATE FINANCIAL SUPPORT

Those who are not in close touch with the status of organized textile research in this country may be interested to know that projects now in progress, and that are sponsored by The Textile Foundation, The Chemical Foundation, the American Association of Textile Chemists and Colorists and U. S. Institute for Textile Research, call for expenditures aggregating over \$100,000. If this were the annual yield of some foundation's safely invested trust fund, a capital fund of over \$3,000,000 would be required. Compared with the much larger sum that is spent annually in England for textile research, it is ridiculously inadequate to meet the research needs of the whole domestic textile industry. Certainly if two cents per bale of cotton, contributed jointly by shippers and spinners, is a fair annual expenditure for the development of new uses for old cotton products, then one-tenth of one per cent of annual gross sales of shippers and manufacturers of all textile raw

materials would seem a modest annual expenditure for the development of new scientific textile knowledge and new textile products and methods.

Textile Industry Pioneered in Air Conditioning

(Continued from Page 20)

Asheville in May of that year, and there outlines a full description of his improved device for accomplishing the features he laid down, at Asheville, as essentials for a properly air conditioned textile plant.

In April of 1906, Mr. Cramer applied for the first patent in which, as far as I can find, the term air conditioning was used. This particular nomenclature anticipated his May address by a few weeks.

Following this, in the fourth volume of the same work, published in 1909, on Page 1395 Mr. Cramer states: "When entering this field, several years ago, I was puzzled to find a word that would embrace this whole subject: in casting about, I finally hit upon the compound word, 'Air Conditioning,' which seems to have been a happy enough choice to have been generally adopted." And on the following page he lays down the cardinal principle that a true air conditioning system should provide for; namely, (a) heating, (b) air moistening, (c) ventilating, (d) air cleansing, (e) air cooling, (f) automatic regulation of humidity and temperature.

It is interesting to note that Mr. Cramer, at that early date, incorporated more into his definition of the term air conditioning than is comprised in the official explanation of the term as adopted by the Air Conditioning Manufacturers' Association in the Fall of 1935, which reads as follows:

"Air Conditioning is the scientific preparation and simultaneous control of the atmosphere within a structure;

"Summer Air Conditioning means at least the cooling, dehumidifying and circulating of air;

"Winter Air Conditioning means at least the heating, humidifying and circulating of air;

"Year-Round Air Conditioning means at least the cooling and dehumidifying of air in summer, the heating and humidifying of air in winter, and the circulating of air at all times;

"Most air conditioning, in addition, cleans the air."

And the above, with minor modifications, is used extensively by the United States Department of Commerce and the National Better Business Bureau as defining the true Air Conditioning art.

It is interesting to note, at this point, that Mr. Cramer went even further with his idea of true air conditioning inasmuch as he included as a prerequisite the Item "C"—ventilation.

All the preceding data is for the purpose of bringing out the fact that Mr. Cramer completely visualized the true and full meaning of the word "Air Conditioning," which he coined and so liberally devoted his efforts to establish in the textile industry.

Practical application of the principle disclosed in his broad conception of the air conditioning art was not confined to the individual humidifier unit with which his

name is more closely linked. From the very start it was realized that true air conditioning could not be applied to every industry with the same identical type of apparatus, and hence it was necessary to have a variety of equipment to offer, and in each case study the special requirements of the individual industry and be able to supply that type best suited for that particular job.

In offering such new equipment to the trade, there was always the question of performance guarantee. The fulfillment of such guarantee implied not only the proper type of equipment to produce the results, but additional regulating mechanism in order to maintain them uniformly. And the successful development of air conditioning equipment has undoubtedly been due in no small degree to the perfection of the regulation or control part of the equipment.

Possibly one of the most important discoveries of Mr. Cramer was that of the relation existing between the wet bulb temperature of the sling psychrometer and that of the wick hygrometer. Prior to 1907 most measurements of humidity were made with the stationary wick-type hygrometer, which was usually notoriously inaccurate and could only be depended upon for rough measurements, even when perfectly clean and in good order. A more accurate means of measuring humidity consisted of the wet and dry bulb sling psychrometer used by the United States Weather Bureau. Still, in this instrument the wet bulb was covered with cloth and required frequent moistening and continued motion through the air to secure accurate readings.

Continued experimentation by Mr. Cramer showed that for all practical purposes a thermometer with an *uncovered* bulb, when exposed to a draft of slightly supersaturated air and moving at a velocity of not less than fifteen feet per second, accurately indicated the identical wet bulb temperature as that obtained with a covered wet bulb sling psychrometer operated in the same atmosphere. Correspondence with the United States Weather Bureau officials at Washington indicated that this fact was unknown to them; indeed, they were reluctant to accept those observations as being true. But these experiments did finally result in an application for United States patent under date of July 23, 1906, which issued in November, 1907, as a basic patent of measuring wet and dry bulb temperature with bare bulb thermometers.

The principle here involved was immediately incorporated in the wickless wet and dry bulb humidity regulator which, with its rugged construction particularly adapted to textile mill conditions, and sufficiently sensitive for accurate control of both humidity and temperature, immediately was adopted as the most reliable controller for mill atmospheric conditions.

At about this same time, studies made by W. D. Hartshorne of the Arlington Mills, at Lawrence, Mass., conclusively demonstrated that in the manufacture of cotton yarn, in particular, the best results were secured by varying the humidity in the room as the temperature rose and fell. This wet and dry bulb wickless regulator was most admirably suited to such variable operation. Its range was adapted to the usual working conditions of manufacturing plants, and because of its simplicity, ruggedness, and accuracy it immediately found a place not only in the textile field, but also in the tobacco, paper,

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and other industries where the regulation of humidity and temperature was highly essential but where existing controllers of the hygrometric, animal, or vegetable type were not sufficiently accurate or long lived to be worth while as a regulating medium.

Mechanical development and improvement of details of that machine continued apace to a point where there was practically nothing left to be desired in its ability to control temperature, humidity, and air change; in fact, it seemed next to human in its actuation in maintaining inside atmospheric conditions at any desired set standard.

The records of the Patent Office bear continuous evidence of Mr. Cramer's activities in the humidifying and conditioning of air, as well as its automatic control.

As early as 1906, air conditioners which brought in fresh outside air, mixed it in greater or less proportions with recirculated inside air, washed it, heated it, and cooled it, were being installed in textile plants both North and South. Impressed with the advantages of properly "conditioned air," in 1909, a mammoth (for that period) air washer with fresh and recirculating air dampers was built into an existing hot blast heating system at the Loray Mills at Gastonia, N. C. At this plant was first demonstrated, on a large scale, automatic control of temperature, humidity and ventilation by means of a rugged wet and dry bulb control instrument. Almost coincidentally a similar but somewhat smaller equipment was installed in the Anderson Cotton Mills at Anderson, S. C. It is interesting to note that after thirty years these equipments are still in operation.

The tobacco industry was quick to perceive the advantages of complete air conditioning, and the larger companies equipped their important workrooms with such central station equipments and automatic control. Today these companies use advertising headlines to impress upon the public the fact that their products are manufactured under the more improved atmospheric conditions.

In these equipments there was present all the essential features of today's modern air conditioning installation except dehumidification. That is, removing excessive moisture from the incoming air. Such procedure was never found necessary or desirable in a textile plant, largely on account of excessive cost of operation.

In 1917, impressed with the improved conditions in their yarn manufacturing plants, both in respect to labor and product, C. W. Gaddy, of the Wiscassett Mills at Albemarle, N. C., pioneered in the application of such air conditioned atmosphere in a new hosiery mill being erected by that company. Results then encouraged Mr. Gaddy to try it out in his Full Fashioned Hosiery Department. Disregarding the protests of the machinery builders, he did apply it to that Full Fashioned Department. Immediately its peculiar usefulness in this particular line of manufacture became apparent. The uniformity of temperature and humidity over the manufacturing area maintained the delicate adjustments of the full fashioned machines during the entire working period, with resulting maximum product, reduction of seconds, and in an unusually healthy group of employees.

Air conditioning applied to full fashioned hosiery plants is now so commonly accepted as a necessity that contracts for such equipment are frequently placed before announcement is made of the new mill.

In textile mills, where unusual attention is paid to the excellence of product, there will usually be found a well equipped testing laboratory. In such a room it is necessary to maintain exact conditions of temperature and humidity regardless of outside weather conditions. This requires heat for the winter months, refrigeration for the summer, added humidity at certain times, subtracted humidity at other times, with enough outside fresh air admitted at all times to make working conditions ideal. And all of this under the precise control of accurately adjusted and calibrated instruments to sense and feel the air and automatically, night and day, several hundred times if necessary, turn off and on valves, dampers, fan motors, and all the accessories entering into the production of an atmosphere that will reflect with accuracy the precise conditions demanded for the textile product under test. Here again the textile industry relies on air conditioning.

Within the past two or three years, the latest development in textile manufacturing appears to be the introduction into the machine area a measured quantity of outside air. Instead of opening the windows for ventilation, according to the time-old custom, the windows are now kept tightly closed. But into the upper stratum of the room fresh outside air is introduced and the existing moisture producing equipment is utilized in connection with this incoming air, to absorb the machinery and other heat existing in the room, and yet maintain uniform conditions in the working area and far more comfortable than with window ventilation. Here again, in this arrangement, the success depends largely upon the control apparatus and the most successful results are secured with wet and dry bulb regulation.

And so, (in reviewing the history of this air conditioning art, it seems clear that the textile industry has been quick to recognize the inventive ingenuity of the engineers responsible for the development of these air conditioning devices and take financial advantage of the bettered manufacturing conditions they have produced. As time moves on, further improvements along this line will undoubtedly be quite as eagerly seized upon and advantageously used by our manufacturers.

Japan's Cloth Exports To America Increase

Washington, D. C.—The commerce department reported today that cotton cloth imports doubled in volume during 1936. Purchases from Japan doubled both in volume and value.

Last year, the department said, imports totaled 144,185,000 square yards, valued at \$10,558,000. This compared with 63,674,000 square yards valued at \$7,050,000 in 1935. Imports from Japan last year totaled 77,066,000 square yards valued at \$3,456,000, compared with 36,475,000 valued at \$1,723,000 in 1935.

In December, totaled imports were 15,123,000 square yards valued at \$1,264,000, compared with 4,910,000 square yards valued at \$612,000 in the same month a year ago.

Japan supplied 10,839,000 square yards valued at \$474,000 last December compared with 2,492,000 square yards valued at \$12,000 in December, 1935.

Maximum Packages Cut Costs and Improve Quality

(Continued from Page 9)

attitude at once. If, by a little research and thought, you can increase the net weight of the sliver in the can to, say, even twelve pounds (which is not the maximum on most work), you will have saved 25 per cent of the labor involved in doffing the drawing and creeling the slubber, and 25 per cent of the uneven places in the roving which are caused by piecings. This would surely be worth the effort.

Likewise, the roving frame processes offer food for thought. Even though the flyers may be full at the end of the doff, we may be getting an under-maximum package because of a too spongy bobbin. Finding the correct relation between stroke, lay, tension and taper for each hank roving is tedious but well worth the trouble. Level carriages, balanced and well blocked flyers, level flyer tops and level bobbin gears—all are essential in squeezing the last ounce out of the frame.

No process in the average mill offers quite such a wide open and fruitful field for improvement in package as does the spinning frame. The writer's own experience includes the observation of a spinning room's raising the standard net weight of a doff of warp bobbins from fifty-seven to seventy-three pounds without any change in traverse, ring size or wooden bobbin. Not a single part was added to the frame and nothing was substituted or changed except the weight of the traveler and the change gears necessary to obtain the most perfect inter-relation of stroke, lay, pick and bobbin-former. The combination of these adjustments produced a good, firm bobbin that was vastly superior to the old, softer package. It sounds amazing, but it is true nevertheless.

A little figuring will bring out the fact that this increase in the net weight of the spinning package saved the mill 28 per cent of its former doffing cost and increased production to the extent of the saving in doffing time-loss per frame. A proportionate saving was made in the following process, not to mention the big improvement in the quality of yarn due to putting the winder knots 28 per cent further apart.

So much for illustrations—these are only a few of the many processes where there are possibilities of finding means to attain maximum packages.

It should be remembered that a heavier net weight package does not necessarily mean that the package has to be any greater in dimension. There are, however, places in the mill where it may be practical to make changes in our present equipment which would enable us to increase the size of our package.

To illustrate the point—take the case of the spinning frame. The ring rails may be bored out to accommodate a larger ring (if the frame's gauge will permit); traverses may be lengthened by lowering bolster rails and substituting longer bobbins; traversing thread boards may be added. Singly or in combination, these changes enable us to make a larger package.

Spinning is not alone in respect to such changes. Modifications throughout all the textile processes can be made with the same end in view. Naturally, the degree of success depends on the condition and design of

the equipment as well as on the limitations imposed by the character of the product.

Perhaps your mill is unique in having already exhausted all possibility of further savings via the maximum package route. If this be true, Brother, congratulate yourself on occupying an uncrowded niche in Textile's Hall of Fame.

The Past 15 Years Have Witnessed Many Major Improvements

(Continued from Page 18)

New drawing frames were built and an improved sliver was produced.

Roving frames were improved in design and performance was greatly improved with regard to tension through scientifically designed cones. Long draft was applied to roving frames allowing greater drafts with improved quality.

Spinning frames were improved in many ways, case-hardened steel rolls, heat-treated spindle blades, traversing thread board, improved rings, better builders and long draft system applied, resulting in higher speeds, larger packages, higher drafts and greatly improved yarns.

Great improvements were made in twistors resulting in higher speeds and larger packages and better quality. High speed spooling and warping developed resulting in enormous increases in speed of winding and warping. This was a major development and greatly increased production. At the same time it greatly improved quality of yarn wound so that weave room efficiency was noticeably increased. Also like one-process picking it released a lot of valuable floor space.

Long draft spinning as it was generally called in the beginning was the outstanding development. This new system made it possible for mills to produce, at a lower cost, yarn that was far superior to that made on spinning frames built previously. It was one of the greatest improvements of all time in spinning yarn and marked the beginning of a new era in the spinning and carding department.

Next in importance to long draft spinning was the development of a roving frame system that would allow mills to take sliver from the drawing frames and produce any hank roving desired in one process. This development is new but has proved by performance over the past few years that roving can be produced which compares very favorably with roving produced heretofore with three processes of regular roving frames.

These improvements have come along so fast that it is almost unbelievable these major changes could have been developed and accepted in so short a time but their acceptance is already history.

In addition to these machine changes and improvements which the mills have steadily taken advantage of, since 1921 there has been an ever-increasing tendency on the part of cotton mill managers to more intelligently operate their machinery both from a mechanical and operative standpoint.

Specialization is still practiced generally only in weaving. There has been a tendency to specialize in some of the other departments but not to any great extent.

What has taken place, however, is the appreciation of the fact that the amount of effort required by labor to operate machines is governed by the quality of the raw material, how well the operations are planned and the mechanical conditions maintained. End breakage on spinning frames and looms is closely watched and the causes investigated with the purpose of eliminating the causes as far as possible. Constant improvement is being made in operating conditions by means of controlled humidity. Accident prevention is being stressed more and more.

The result of these changes in mechanical equipment and methods of operating are startling. A mill equipped and operated on the basis of only twenty years ago could not compete with an up-to-date mill on the basis of quality and the difference in operating costs would remove all possibility of economic competition. At the present time we are enjoying a period of fair profits for the mills but as always since the beginning of business, hard stern competition will return, the buyers will again be in the saddle and the mills modernly equipped and using modern methods will set the pace. Mills not so well equipped and managed will go the way so many have gone and will finish poorly or not at all.

Modern equipment and methods mean assured profits to owners, higher wages and steady employment for the operatives which added together mean a better world to live in.

Textile Merchandising Methods Have Been Modernized

(Continued from Page 12)

however, that mills on the average are earning less money per yard than is indicated by the price per pound as quoted on spot goods. It is also true that even the lowest prices now prevailing—the quotations on the most distant deliveries—show a good profit to mills with anything close to an average cost. This mills, too, can average their selling prices just as the buyers are averaging their cloth costs, and it is safe to say that few if any mills have a total of unfilled orders on their books at an average price which does not show a profit.

The statement has sometimes been made that there are various merchandising set-ups some of which must be inefficient. In other words, it is contended that if one selling method is correct, the others must be incorrect. A little consideration of the question in the light of known facts will demonstrate that because mills have different problems to meet, they must meet them in different ways.

For example, there are some mills which are so well financed independently that they need no outside assistance, either from banks, from factors or from selling houses. Such mills can and do merchandise through their own New York selling organizations. Others have a wide variety of fabrics many of which are identical with fabrics made by other mills. For such mills, sales through completely independent selling houses, at a fixed commission rate, provides an excellent means of disposing of production, since it permits concentration of men on types of fabrics rather than on individual mill-makes. The method of selling through a commission house which in effect is jointly owned by the several mills for which it

acts as agent also has proven successful, in the case of Southeastern Cottons.

A further consideration in selecting a selling method is the relation of the type of fabric to the type of outlet. Thus some standard gray cloths are bought almost exclusively in New York, so that a mill whose financial and other conditions permit may well sell through a small office of its own in the Worth Street district. Mills making products sold to various outlets, such as colored yarn cloths selling chiefly to garment manufacturers, wholesalers and retailers, can often do better by selling through a large commission house which has established offices in key cities and which maintains a staff of road salesmen who contact directly the various wholesalers and garment manufacturers. It is patently impossible for an individual mill to maintain such an organization, but a commission house selling a variety of products can, by the division of expense, handle the problem nicely. A salesman, for example, may in a single day sell denims for one mill to a garment manufacturer, towels to a wholesaler, and gray twills or drills to a shoe manufacturer.

The conclusion is inescapable that Worth Street, as well as the mills, is alive to the importance of modern methods.

Rayon Novelties for Spring Season in Big Demand

(Continued from Page 16)

crepe back satin for higher priced models.

A style development in the rayon field, which, while it does not affect weavers, is decidedly important, is the surprising vogue accorded to printed rayon jerseys. These are being used for everything from bathing suits to evening dresses.

Despite the sharp increase in the consumption of rayon staple fiber in this country, the number of new cloths developed has been surprisingly small. This is largely due to the fact that domestic staple is cut in lengths suitable for cotton spinning and the fine cotton goods mills have been far too busy on cottons this season to devote much time to experimentation in the use of other fibers.

The spun rayon challis so popular last summer is staging a comeback with an improved finish and mills making this cloth expect to move many thousand yards. The linen-like and novelty shantung weaves in spun rayon, which are a newer development, are also meeting with wide acceptance for the current spring season.

Kendall May Exhibit

Charleston, S. C.—The large collection of early maps of Carolina and prints of Charleston owned by Henry P. Kendall, of Camden, S. C., and Boston, and president of the Kendall Mills, which was to have been shown February 17th-April 1st at the Gibbs Art gallery, will be shown instead March 10th-April 11th.

Delay in cataloging the large number of additions to the collection was cited as the reason for postponement. The collection has been enlarged considerably since the exhibition at the University Library in 1930, at Columbia. Mr. Kendall's announcement that the collection would remain in South Carolina has facilitated gathering more maps.

Great Progress in Rayon Sizing

By S. M. Ferrer

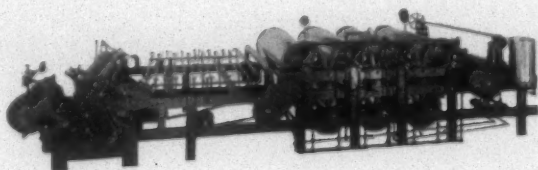
IN contrast to the crude methods of size application up to a few years back, the modern methods of sizing rayon yarns are a miracle of scientific accuracy and control.

Early rayon sizing was done on the then existing equipment, designed to handle relatively stable cotton warps. Rayon, however, has properties of its own, which vary with conditions of moisture and heat, to which the other fibers were insensitive.

The first great stride was made when three cylinder sizers, especially designed for rayon sizing, were introduced, with adjustable quetsch pressure, control of cylinder temperatures and attention began to be given to synchronizing the speed of the various parts of the sizer to control stretch.

Under the urge for better rayon warps at higher production speeds, the number of cylinders has progressively been raised, first to five and then to seven, reducing the heat required in the individual cylinders without slowing down production.

The problem of stretch has largely been solved by devices that control tension on the warps while on the drying cylinders—such devices as draw rolls between the last cylinder and the loom beam. Stretch can be reduced to



any degree desired, and the same amount of stretch can be given to a whole run of warps with mathematical precision, through the use of the modern change-bearing box.

Typical of the way in which manufacturers of sizing equipment meet the changing requirements of the rayon industry is a new sizer that is easily convertible for use either with the silk or cotton system of rayon production.

Control of every step in the sizing process is now accomplished by precision instruments for measuring heat and tension. Cylinders are automatically drained. Tension is carefully checked. It is now possible, raw yarn qualities being the same, to duplicate exactly one run with another similar run of warp.

Conditioning units are now provided by which the yarn can be brought to room temperature as it comes off the sizing machine, assuring a uniform condition of the warp on the beam and preventing brittle or stiff ends.

In short, it would seem that every requirement of rayon conditioning had been met by modern sizing equipment and methods. Yet progress does not acknowledge perfection. The coming years will bring new problems, which will be solved by manufacturers as they arise.

Former Mill Men Open Restaurant

N. A. Gregg, former superintendent of the Stonecutter Mills, Rutherfordton, N. C., and his son, J. Murphy Gregg, former secretary of the Southern Textile Association, have opened a restaurant at 188 South Tryon street, Charlotte, N. C., in the building recently vacated by Thacker's Restaurant.

The restaurant is modern throughout. Its equipment embraces all of the more recent improvements in restaurant furnishings.

New Textile Patent

Paul B. Eaton, patent attorney, announces that Charles L. Kennedy, of Columbia, S. C., has been awarded a patent on a loom having a spring for driving the picker and a trigger for releasing the picker and a shuttle check mechanism with means for releasing the shuttle check mechanism prior to release of the picker.

January Raw Silk Mill Takings Are Highest in 15 Months

Raw silk takings of American mills in January climbed to 44,198 bales, the largest figure in 15 months, or since October, 1935, when the figure was 48,167 bales. The figure was pretty much in line with bullish market expectations though 1,000 bales less than some trade figures had anticipated. Prices, nevertheless, were lower in Commodity Exchange, Inc., trading.

It compares with takings of 38,995 bales for January of last year, a gain of 5,203 bales, and with 41,627 bales for December, 1936.

Imports in January were 50,328 bales against 40,565 in the same month a year ago and 45,328 for December.

Stocks at the end of the month totalled 50,544 bales compared with 56,511 bales this time a year ago and 44,414 bales at the end of December.

Both the takings and the imports from Japan which were 44,093 bales during January for the moment recall the arrangements made last year for increasing the fund to promote silk in America. It is pointed out in market conversations that the arrangement by which the Central Raw Silk Association of Japan assesses export silk at the rate of 5 yen a bale, the funds to be used in silk promotion in America, is now in effect, having started to function as of January 1st.

Much interest centers in the amount of the fund. Since it is based on shipments, rather than on consumption, it is difficult to say at this time how many bales served to aid the fund in January since some of the bales in the total imports from Japan during the month naturally were shipped in December. A rough estimate based on imports of 44,093 bales from Japan in January would figure to 220,465 yen. This can be only an indication, however, since the figure of 44,093 bales is not the actual figure on shipments.

Inasmuch as the interests of silk have been consistently promoted through the International Guild, Inc., interest is growing in what this organization may plan for the coming months. Executives, however, have no comment to offer at this time.

SELLING AGENTS for SOUTHERN COTTON GOODS

Deering Milliken & Co.

Incorporated

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New York

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CURRAN & BARRY

320 Broadway

New York, N. Y.

Wellington, Sears Co.

93 Franklin St., Boston

65 Worth St., New York

Philadelphia

Chicago

Atlanta

New Orleans

San Francisco

Domestic

Export

MERCHANDISING

Joshua L. Baily & Co.

10-12 Thomas St.

New York

BULLETIN Classified Ads

Bring Results at Low Cost
Make Your Wants Known Through
This Medium

Cotton Goods Markets

New York.—While there were some spurts of activity in cotton goods during the past week, the situation as a whole was not up to the standard of recent weeks.

The acceptance of third quarter print cloth business at quarter of a cent concessions by one or two mills was the subject of adverse criticism in centers where arguments in behalf of sane-selling were recently heard. Mills were unwise, according to the view of these observers, to have succumbed so quickly to the easing influence of the declines in premium prices. The deflation of premium prices, they declared was a natural and expected thing. The easing of late deliveries was not.

Theoretically, it was further insisted, the more skillful course would have been for mills to have declined the first business offered them below the market. If the mills had been anxious over long-range production trends or were feeling unsettled for other reasons, they need not have displayed their hands so openly. Other observers were inclined to regard the easing in late contracts as a natural relaxation after several weeks of dullness. A contributing factor, they thought, might have been the fact that this week most of the larger percale houses have made 80-squares available to the cutting up trade at 14 cents, for deliveries through the summer months.

There were some instances where the sharpest concessions granted on print cloths during the middle of the week.

The quick rebound from the lowest prices engendered new confidence and brought in a little business. This, together with the fact that the buyers involved in the initial buying were the same group who had started each of the major buying movements of the last six months or more, was considered likely to result in more general buying operations in the near future. These buyers have so often repeated their timely buying that they have come to be regarded as in possession of unusual sagacity.

Coarse yarn goods continued to be distinguished by definite firmness.

Print cloths, 27-in., 64x60s	53¼
Print cloths, 28-in., 64x60s	6
Gray goods, 38½-in., 64x60s	77½
Gray goods, 39-in., 80x80s	10½
Gray goods, 39-in., 68x72s	8½
Tickings, 8-ounce	17½
Denims	15½
Brown sheetings, standard	11
Brown sheetings, 4-yard, 56x60	8¾
Brown sheetings, 3-yard	10½
Dress gingham	16
Staple gingham	12

J. P. STEVENS & CO. Inc.

Selling Agents

40 - 46 Leonard St., New York

Cotton Yarn Markets

Philadelphia, Pa.—During the past week carded cotton yarns moved into new high ground for this movement. This has been expected by yarn suppliers since late last month, partly because demand had another spurt, but chiefly due to continued difficulty in arranging for shipments satisfactory to late customers.

Extra quality carded yarns are now bringing their highest prices since 1934, when the cotton processing tax accounted for about 15 per cent of the market price. Ordinary quality carded weaving and knitting yarns have lately moved to a new peak for the June-to-February buying movement. An early upward adjustment of single and ply combed yarn quotations is looked for by local suppliers. Buying during the week increased moderately. Inquiries are more numerous than heretofore since December. Delivery requisitions remain heavy. In some departments, it is evident that the consuming mills are still increasing their operations.

Some buyers are watching closely the activity of carded yarn mills towards increasing production through increased hours and in some cases through the starting of mills which have been idle.

There are many indications that just about enough yarn is being spun to meet customers' immediate needs. Some manufacturers are complaining of delays. Late comers find deliveries hard to locate for nearby and March use. It is a common experience for buyers to shop around and then pay premiums to get what they want. In some trades, such as wire covering and floor coverings, demand for merchandise has induced additional covering with yarns, which has caused advances in carpet and insulating yarns.

Southern Single Skeins

8s	29
10s	29 1/2
12s	30
14s	31
20s	33
26s	35 1/2
30s	37 1/2
36s	40 1/2
40s	44

Southern Single Warks

10s	31 1/2
12s	31
14s	32
16s	32 1/2
20s	34
26s	36
30s	38
40s	45

Southern Two-Ply Chain Warps

8s	31
10s	32
12s	32 1/2
16s	33
20s	35 1/2
24s	37
26s	38 1/2
30s	40 1/2
36s	43
40s	47 1/2

Southern Two-Ply Skeins

8s	30
10s	30 1/2
12s	31
14s	32 1/2
16s	32 1/2
20s	34 1/2
24s	35 1/2
26s	36 1/2
30s	39
40s	45 1/2

Two-Ply Plush Grade

12s	32 1/2
16s	34 1/2
20s	36
30s	41 1/2

Duck Yarns, 3, 4 and 5-Ply

8s	29
10s	30
12s	30 1/2
14s	32
16s	34
20s	35

Carpet Yarns

Tinged carpet, 8s, 3 and 4-ply	28
Colored stripe, 8s, 3 and 4-ply	28 1/2
White carpets, 8s, 3 and 4-ply	30

Part Waste Insulating Yarns

8s, 1-ply	26
8s, 2, 3 and 4-ply	27
10s, 2, 3 and 4-ply	28
12s, 2-ply	28
16s, 2-ply	30
30s, 2-ply	37

Southern Frame Cones

8s	29
10s	29 1/2
12s	30
14s	30 1/2
16s	31
20s	32
22s	33 1/2
24s	34 1/2
26s	35 1/2
28s	36 1/2
30s	37 1/2

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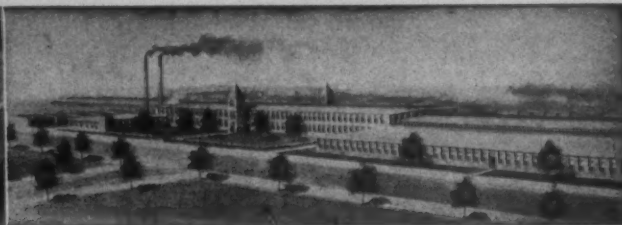
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Visiting The Mills

By Mrs. Ethel Thomas Dabbs (Aunt Becky)

Rock Hill, S. C.—Highland Park Mfg. Co.

WHERE PERFECT QUALITY BROADCLOTH IS
MANUFACTURED

During the noon hour while the work had stopped for operatives to have lunch, I had the pleasure of a visit in the cloth room, where there are many charming ladies employed. Am always glad to meet the ladies—especially when they are as pleasant and friendly as were Mesdames Furr, Wallace, Hammond, Morris, Boyd, Culberson and Steele. Several had read some of "Aunt Becky's" books and seemed pleased to meet the author.

Of course, I had to examine the lovely broadcloth, and can truthfully say it is as near perfect as cloth can be made. "Quality" and NOT quantity is the motto here. There are no knots and gouts in filling or warps.

The girls and women in this mill are adopting uniforms, and have certainly chosen lovely and well made ones—blue with white trim, and when good looking women with nice figures get in one of these dresses, the effect is extremely pleasing.

Miss Mozelle Hollar, the office lady, has a charming personality, knows how to meet people and put them at ease. James F. Drennan, office manager, and Superintendent C. N. Steed are always pleasant and courteous. Mr. Steed doesn't look a day older than when I first met him over 20 years ago. He certainly must have been to the Fountain of Youth and filled up with the magic stuff.

Others among the key men are G. F. Wallace, overseer weaving; J. H. Furr, assistant overseer; W. P. Sharpton, R. P. Sutton, J. B. Moore, loom fixers; E. C. Slaton, overseer slashing. A no-drip slasher hood is to be installed here soon.

T. F. Blume is overseer carding, and has taken The Textile Bulletin since it was first published; E. F. Wyatt is section man in carding; T. R. Foster is second shift carder; E. J. Powell, overseer spinning, is the proud father of twin girls—one a blond and the other a brunette. G. S. Clark and J. W. Clinton are among the section men in spinning.

Rhodhiss, N. C.—Rhodhiss Mills Co.

There are two of these mills, one on each side of Catawba river, therefore in two different counties—Catawba and Caldwell. The offices and Mill No. 1 are in Caldwell, a mile or two from the pretty little town of Granite Falls. Hickory is only a few miles away in Catawba

County, and is one of the most progressive towns in the State.

It was ground-hog day when I was in Rhodhiss, a fair and beautiful day. A group in the office was worrying because the critter had "seen his shadow," when J. G. Poovey, outside overseer spoke up:

"I told 'em to not make me crawl out this morning, so now they can take what comes!" Well, I had always wanted to see a ground-hog, but I didn't know Mr. Poovey was IT! He has been employed in these mills and around them for thirty years, and from what the writer saw and heard he must be a regular fun incubator.

Clarkson Jones, superintendent and assistant secretary, was in conference with R. C. Moore, president and treasurer, and I just did get to see him. L. A. Elmore, assistant superintendent, is always my escort and courteous assistant when I visit here, and I wouldn't know how to get about without him. He is one hustler, and knows how to rush things through and save time for all concerned.

W. W. Hinson is overseer carding and spinning in Mill No. 1; J. A. Williams is overseer weaving, Mill No. 1.

C. F. Woods is overseer carding in No. 2; B. B. Burnett, overseer spinning, and C. F. Kirby, overseer weaving; M. C. Smith, overseer cloth room.

Among the second hands are W. M. Childers in carding; C. O. Champion, T. L. Duncan and L. A. Curtis in weaving; other young men who are working up are E. P. Elmore, R. D. Bershears, C. L. Barber and others. C. J. Bumgarner is second hand in spinning in Mill No. 2. H. C. Cobb, Jr., is an ambitious young man who has a position in a mill at Granite Falls, but gets his mail in Rhodhiss.

The young men in these mills are taking textile courses and attend textile classes taught by a leading textile teacher. They will make good.

Statesville, N. C.—Statesville Cotton Mills a Most Interesting Textile Plant

To one who saw this place 25 years ago, present conditions seem sort of miraculous. Years ago the grounds were uncared for, cluttered with rubbish, tin cans, etc.—unsightly and unsanitary.

Now the back side of the plant is as pretty as the front—in fact, there is no "back side." Landscaping, evergreen hedges, shrubbery and grass, pretty all the year around, delight the eye at every turn.

The beauty outside surely must inspire those inside, for the most gorgeous patterns and colors in velour upholstery is designed, woven and finished here, to brighten

up thousands of homes for particular people.

W. C. Sykes, superintendent, has been here around 17 years if I make no mistake. He helped to design, build and equip the weave room for this difficult weave, and with his able assistants, learned the mechanism of those complicated looms and how to run them, with no experienced operator to teach them. In fact, the entire operation was a venture that was rather an Adventure, at a time when little was known in the South about the manufacture of this kind of goods. And they succeeded! Probably Mr. Sykes' name is "Will," since we have always heard that "Where there's a Will, there's a Way." Mr. Sykes is one of the most interesting conversationalists the writer has ever met, and it is a real treat to call at his office. His son, C. A. Sykes, is the able assistant superintendent, and another son, W. C. Sykes, Jr., is overseer winding and twisting.

C. F. Campbell is overseer carding; C. C. Privette, overseer spinning; L. S. Billings, section man in winding; C. R. Wintzer, designer.

CHICKENS AND MORE CHICKENS

Mrs. F. B. Bunch, wife of the popular secretary and treasurer of Statesville Cotton Mills, has two hobbies—hatching chickens and collecting antique furniture, and she excels in both. She started a hatchery on a small scale ten years ago, now has a 77,000-egg capacity and will hatch 200,000 chicks this season.

Her collection of antique furniture is the finest the writer has ever seen, and makes one think of castles in foreign countries. Aunt Becky was an honored guest for lunch in this lovely and hospitable home.

Bladenboro, N. C.—Bladenboro Cotton Mills

There are two of these mills (both yarn mills) located on Highway 211, several miles below Lumberton. This is a fine strawberry section, and strawberries were in full bloom the last of January—some even had berries half grown. Pear trees and spring flowers in full bloom gave color and beauty to the landscape. No doubt they have all fallen victims to Jack Frost ere this, and we will miss our annual supply of pear preserves and strawberry jam.

When Bladenboro Mills villages came in sight, this scribe was delighted to see that the homes had been improved and nicely painted in different colors. This low country, with its heavy fogs, is detrimental to paint, and it takes only a few years to make houses look extremely weather-beaten. But a good coat of paint applied at regular intervals (and not too far apart) makes a tremendous difference in appearances, protects property and enhances its value far beyond the cost of such improvements.

The Bridger brothers are outstanding citizens of Bladenboro County. If I make no mistake, their father was the founder of Bladenboro Cotton Mills, and started with around 8,000 spindles; now these mills have about 40,000 spindles and provide employment to a large number of people.

One of the five Bridger brothers is a doctor, one a banker, one a merchant and two are in charge of the mills. J. L. Bridger is president; C. O. Bridger is vice-president and treasurer; F. T. Gibson is secretary and T. A. Ballard is superintendent.

It is a real treat to visit this mill office, and a cordial

welcome is always extended to "Aunt Becky"—neither is she kept waiting. Just about every key man in these mills takes The Textile Bulletin, and the list grows larger each year.

In speaking of the village improvements, we must not forget that the mill has also received a proportionate share of attention. Long draft spinning, new cards, new winders, and a new warper have been added and a coat of shining white paint applied inside the mills.

The effect is pleasing in various ways. Besides the improvement in property, every operative seems to have been elevated to "higher ground." There's an atmosphere of personal dignity and worth and a careful attention to personal appearance that is commendable.

OPERATIVES ARE THRIFTY AND GENEROUS

And, best of all, operatives are building homes of their own in a development near the village and convenient to their work. Around 35 or 40 homes have been built by prideful citizens, and here's congratulations and sincere hopes that every one will carry on to the "last round-up" and a clear title.

These people gave liberally to the Red Cross for the flood sufferers, too. Only \$60.00 was asked, from the Bladenboro chapter, but more than \$300.00 was promptly contributed—thanks to these big-hearted mill operatives who "gave till it hurt," and not a single one mentioned it as an excuse to keep from taking our paper, but took it as same as ever and in larger numbers—thanks to Mr. Dunn, assistant superintendent, Mr. Ballard, superintendent, and other boosters for The Bulletin.

R. M. Hester and J. C. Hester are overseers of carding; Foster Smith, a card grinder; W. E. Brown is overseer spinning and winding in No. 1; J. B. Bennett, overseer spinning No. 2; W. W. Edwards, overseer spinning No. 3; Fred Williams and Harvey D. Wright, second hands in spinning; A. Gaston Hester and Walter Barber, section men in spinning; Byron Bullard and H. C. Bennett, second hands in winding; C. B. Hasbrouck, overseer dyeing; D. C. Butler, master mechanic.

McColl, S. C.—Marlboro Cotton Mills

This section of South Carolina is very fertile, easy to work, and everybody tries to see who can grow the finest cotton or collards. It is not unusual to see several bales of cotton stacked in the ward of farmers, and collards grow so large in mill village gardens that they look like decorative trees or shrubbery; chickens use them for shelter from rain—when they don't eat them up.

There are five plants in the Marlboro Cotton Mills group, four at McColl and one at Bennettsville, a few miles distant, all running full time, two shifts, and furnishing employment to several hundred people. The product is mainly tire fabric for the rubber industry, hosiery yarns and upholstery.

OFFICIALS

C. A. Gwaltney is president; C. O. Bridges, vice-president; S. F. Adams, secretary; D. K. McColl, treasurer; John A. Baugh, Jr., general manager, and Giles A. Hale, general superintendent.

Messrs. Gwaltney and Baugh are friends of long standing, and we have a large number of subscribers to our paper at both McColl and Bennettsville whom we appreciate very much.

YOUNG MAN, age 25, with business education, desires to connect with some good company in general office work. Served number of years as shipping clerk as well as keeping time and production. Thoroughly familiar with yarns as well as sizing and tensile strength. Can furnish high class references. Address "Clerical," care Textile Bulletin.

CARDER—16 years experience on combed work, wants medium or large job. A-1 man. Age 37. Married, industrious. Now employed. Good reasons for wanting to change. Good references. Go anywhere. Address "Carder," care Textile Bulletin.

Plan Gymnasium

Lindale, Ga.—Plans are under way here for the construction of a modern gymnasium at the Lindale unit of the Pepperell Manufacturing Company. It is understood that the plans for the building have been drawn.

Recreational Building

Winston-Salem, N. C.—A recreational building will be provided for the employees of the local unit of the Chatham Manufacturing Company, it is stated here. The present office building will be used for this purpose upon the completion of the new office building. Included in the clubhouse will be the club rooms for meetings of all kinds, billiard room, etc.

Chapman Estate Appraised

Spartanburg, S. C.—The estate of the late James A. Chapman, president of Inman Mills and Enoree Mills, in this county, was appraised at \$459,629.84. The report showed the estate consisted mainly of mill stocks. James A. Chapman, Jr., vice-president and treasurer of the mills, Robert H. Chapman, executive, and Mrs. Laura Chapman Jackson, children of the deceased, were named beneficiaries for the entire estate. A president for the two mills is to be named about February 15th.

Johnson & Johnson Defends Position

New Brunswick, N. J.—"Johnson & Johnson is determined to produce sterile products and to publicize the fact as widely as possible. As leaders of the surgical dressings industry we recognize the obligation to crusade unceasingly to protect the public from the health hazards of inadequately sterilized dressings."

Classified Department

WANTED—Position as carder or spinner, or both, by man aged 44. Clean habits, long years practical experience. I. C. S. graduate. Can get results at pleasing cost. Good references. Services available at once. Address "Southerner," care Textile Bulletin.

POSITION WANTED—Experienced yarn mill man; 15 years under best mill men in country; settled and willing to show ability. Best of references. Address "M. G.," care Textile Bulletin.

FOR SALE

One continuous 12-ball, 5-box Indigo Machine with 18 can set of drying cans complete with 12 collar heads compensating reels and sky-ing reels. Machine in good condition. If interested, call and inspect. Will sell at a bargain, as we need the space.

Pilot Mills Co.
Box 289 Raleigh, N. C.

POSITION WANTED—Overseer weaving; age 29; married. Three diplomas on plain weaving, carding and spinning. A-1 loom man. Go anywhere position offers opportunity for advancement. References. Address "T. A. C.," care Textile Bulletin.

WANTED—A raw stock dyer and bleachery foreman. Must be capable of handling help. Young man preferred. Address "D. & F.," care Textile Bulletin.

WANTED—SCRAP IRON

In carload lots, F.O.B. cars, or our crew will load. Can use all grades, including heavy engines and boilers; pay spot cash. Also buy non-ferrous metals. Please get our offer before selling.

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Former Member Examining Corps
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SALESMAN WANTED—To travel South for well known manufacturer of leather belting. Good opportunity for right man. Address "Leather Belting," care Textile Bulletin.



Let us quote you on your requirements.



PAUL A. DUNKEL & CO., INC.
82 WALL ST., NEW YORK, N.Y. Hanover 2-4436

This statement of policy was made by F. A. Cosgrove, secretary of Johnson & Johnson, in outlining the company's position in reference to the issuance by the Federal Trade Commission of a complaint against Johnson & Johnson, charging unfair disparagement of competitors' goods. The commission's complaint relates specifically to Johnson & Johnson's current advertising campaign, which stresses particularly the need for sterilizing surgical dressings after packaging.

"We understand that the complaint refers to our criticism of surgical dressings of 'unknown make,' which we have always interpreted to mean products not bearing the name of an identifiable sponsor. We believe that such vital necessities should be clearly identified with the name of the sponsor responsible for the label claims. In this belief we are supported by the drug trade. We also understand that pending revision of the Federal food and drug act proposes to require such identification.

Tendencies

(Continued from Page 8)

in the United States decreased 10,103,854, the spindleage in the Orient increased 18,813,000.

It may not be amiss here to stop and recapitulate so far. The production and consumption of American cotton has decreased rather noticeably. The production and consumption of foreign grown cotton has increased rather alarmingly.

The decrease of spindles in place in the United States has been rather rapid and continues. The increase in spindles in the Orient is moving rather rapidly and its influences are being made manifest as the days go by.

Cotton spinning and weaving once resided in England and every one thought it would never move. The textile center moved to New England and that section thought the South foolish to believe it could spin and weave. An important sector of the world industry is now in the South and many people have thought they could treat it any way and it would stay.

Today as the Orient posts its spindleage at 25,582,000 and the United States posts its spindleage at 27,700,194, in place, with only 24,090,204 active at the end of the year, it is easy to see that the South along with the United States is dropping into second place compared with the spindleage of the Orient.

The fates seem to have determined that the cotton textile center of the world is to move again, unless something can happen different from what has been happening during the last few years.

OTHER COMPETITION

Not only does the United States cotton textile industry have to compete with the growing spindleage of the Orient, with its cheap labor and varying economic and political systems, there is also a tendency in many other countries to become industrially integrated as several countries in South America and Europe will indicate.

OTHER FIBRES

The cotton farmer and the cotton textile manufacturer must meet with the competition of jute, unmanufactured and manufactured, which floods this country yearly and which came into this country in 1935, to the amount of 714,566,000 pounds, or the equivalent of approximately 1,429,132,000 yards. Much of these goods come in duty free and most of it with no adequate duty that will make it fairly competitive with cotton.

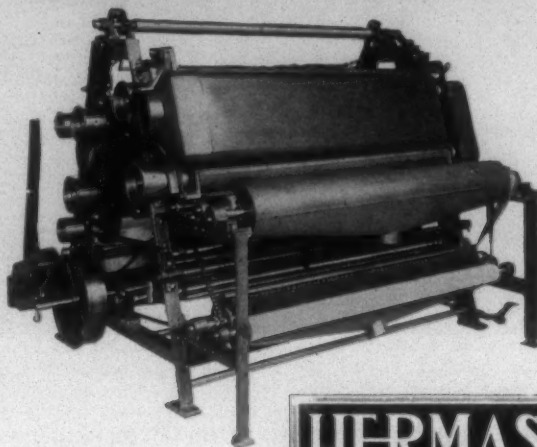
These goods and products come in from India and other countries, in most of which the balance of trade is in favor of the exporting country; this great bulk of fabrics and potential fabrics deprives the textile industry of the employment of approximately 100,000 people and deprives the Southern farmer of the growth of approximately 1,000,000 bales of cotton.

It enters in the form of burlap, bags, bagging, new and re woven, webbing, padding, carpets, yarn and then again, it comes in indirectly in many forms such as the backs of linoleums, carpets, etc.

In 1935-36, India exported to the United States, in one item alone, gunny bags—16,353,900 and to Hawaii, a United States possession, 15,176,000 bags.

(Continued on Page 78)

BUYERS are DEMANDING SHEARED FABRICS!



HERMAS

AUTOMATIC FOUR-KNIFE SHEAR WITH DOUBLE BRUSH UNIT

Ball bearing throughout, positive, accurate automatic seam guard. Shears from 65 to 90 yards per minute. Write for descriptive circular and quotation on unit to suit your requirements.

HERMAS MACHINE CO.

HAWTHORNE, N. J.

Carolina Specialty Co., Charlotte, N. C.

A Meeting Place IN NEW YORK For TEXTILE MEN

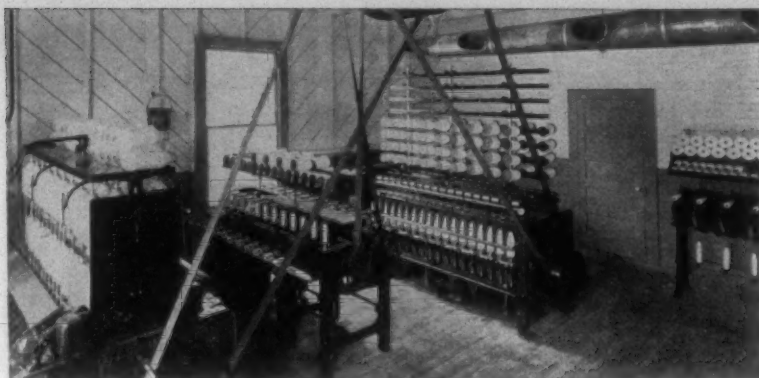
Executives of your industry have favored The Vanderbilt for years... here you will always find men you know...or wish to know. It is convenient for your business requirements... ideal for entertaining.

Spacious rooms with bath from
\$4 single \$6 double

FIVE MINUTES FROM GRAND CENTRAL
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The
**VANDERBILT
HOTEL**

Where Park Avenue Begins . . . at 34th Street
NEW YORK



Model Room with small working units of machines for processing yarns

An Unusual Modernization Program

(Continued from Page 11)

long draft should be added. Consequently these frames were brought right up to date by application of Whitin-Casablancas long draft, and the creels were arranged to handle double roving. The balance of the spinning, being band driven, and of narrow gauge, was replaced with new wide gauge Whitin long draft frames, permitting much larger packages, a very much stronger yarn, and a worthwhile production increase. Only 85 per cent of the narrow spinning was replaced, making a net reduction in the total spindleage of 8 per cent. With average numbers slightly coarser, however, there is an increase in the number of pounds of finished yarn produced of approximately 30 per cent. This is possible on exactly the same number of operating hours because the modern frames run at higher speeds, with better yarn strength and fewer ends down. Using 20's single yarn as a basis, the increase in the breaking strength has been better than 20 per cent.

The difference between the sizes of the yarn bobbins formerly made and those spun on the present frames is quite considerable.

With the larger packages on the spinning, with greater yardage and better yarns, with fewer gouts and slubs, the number of spooler spindles was reduced by 20 per cent. The spoolers, of course, were at the same time equipped to handle filling wound packages.

TWISTERS, WINDING AND WARPING

Seventy-two narrow gauge, band driven twisters were discarded for 46 modern, wide gauge tape driven machines, which gives the mill the advantages of a tremendous increase in yardage, something like 400 per cent. Before making the change, it had been necessary to operate the twisters on three shifts, to balance a double shift in the spinning room. In spite of a reduction of 17 per cent in twister spindles, however, two shifts on the twisters today keep pace with a double shift on spinning, though the finished yarn produc-

tion is increased by 30 per cent. As some of the more modern tape drive twisters already in place were kept, 27 per cent fewer twister spindles were needed to replace those which were discarded.

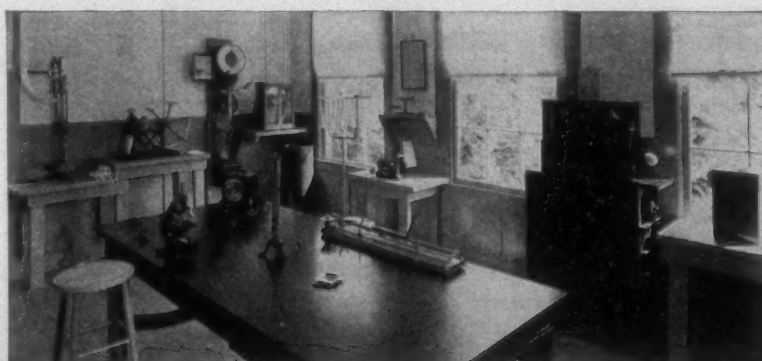
The difference between the former and present twister packages is readily seen in the photographs.

Rocky Mount Mills were using No. 30 winders and ply spoolers. In keeping with the plans carried out in other departments, these machines were scrapped and high speed winders of the latest design were purchased. With the new winders in place, it was then thought desirable to discard the old warpers and to install modern high speed cone creel warpers, which insure a finished product second in appearance to none.

THE EXPERIMENTAL MILL AND LABORATORY

A somewhat unique and unusual feature is the establishment of a small, model mill within the main plant—a mill within a mill. Smaller units of practical size, including every machine required to produce finished yarns have been assembled in what is known as the Experimental Mill. These include a top flat card; drawing, with both metallic and common rolls; two 10" x 5" slubbers, one of them equipped with Whitin-Casablancas long draft, and two 7" x 3½" roving frames, similarly equipped; a spinning frame, a short twister, and a spooler. In the Experimental Mill, which is the development of Mr. Hyman L. Battle, genial treasurer and general manager, opportunity is provided for working out various yarn problems without interrupting regular mill production.

A complete, up-to-date laboratory has been equipped for testing purposes, and these two departments are under the supervision of a young man formerly associated with the State College. Here is a progressive step that indicates the wide-awake attitude of the management, and convincing evidence that nothing is going to be left undone that will insure the best operation of the mills in the future.



Rocky Mount maintains an up-to-date laboratory for complete testing purposes

SUMMING UP

We were very much interested to find, upon checking up with the overseers and operatives of this mill that everyone today feels that he has a better job than he had before. The work load of the operatives has not been increased, as this was not in the plan of the management, although tasks are performed more easily. This mill has always believed firmly in the theory of high wages and a fair day's work for their people. Under such conditions they are convinced the result will be satisfied workers, having pride in their jobs, which always means good production, high quality, and reasonable manufacturing costs. Incidental economies, inevitably springing from the very complete modernization of the entire mill, have been gratifying to the management. The revampment of Rocky Mount Mills might with profit be studied by anyone who contemplates overhauling his present plant with the hope of being better prepared for the upturn in the textile business which seems to be very much nearer than for a long time past.

Ordered To Pay Unemployment Insurance Taxes

Philadelphia, Pa.—Federal Judge William H. Kirkpatrick, after considering a petition asking for instructions, told J. Harris Warthman, trustee for LaFrance Industries and a subsidiary, to pay unemployment insurance taxes of \$15,000.

The petition, filed by counsel for LaFrance and its subsidiary, the Pendleton Manufacturing Company of LaFrance, S. C., asked for instructions from the District Court whether to pay the tax and contended the Social Security Act did not apply to concerns being reorganized under Section 7-B of the Bankruptcy Act.

Judge Kirkpatrick refused to rule on the constitutionality of the Social Security Act, stating the petition presented no issue on which he could rule. He instructed the trustee to pay the taxes with the provision that he be permitted to recover in the event the act is held unconstitutional.

"It is not within the province of the District Court to go out of its way to rule on the constitutionality of an act," Judge Kirkpatrick said.

"If the trustees or stockholders or creditors refuse to pay the tax and the collector of internal revenue takes the matter into court, it would give a controversy on which the court could rule on constitutionality of the act."

Group Meet of Textile Chemists and Colorists Held in Greenville

Dr. Ben E. Geer, president of Furman University and former president of the American Cotton Manufacturers' Association, was the principal speaker at the banquet meeting of the Piedmont Section of the American Association of Textile Chemists and Colorists at Greenville, S. C., January 30th.

The technical program was held at the Poinsett Hotel during the afternoon, with several speakers addressing the group on subjects of interest to the trade.

About 100 persons from the Carolinas attended the sessions.

20%

Of Purchases Bought on Impulse!
with
Co-ordinated Packaging

Your Products Take Advantage of
That First Impulse---which is to Buy

A study of consumer reactions has shown that about 20% of the purchases in a modern grocery store are a direct result of an "impulse" to buy certain products. This impulse buying is attributed largely to package designs. So a good package capitalizes on woman's first impulse—to buy. If you have several wrappings or different products, the packaging or packages should bear relation to each other, having a coordinated style in color or design, so one would help identify and advertise the other. Also by adhering to this unified idea of *matched packaging* you can save money on art, plates and printing.

Let us submit designs on folding set-up boxes, cartons, counter and window displays, and shipping containers.

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Old Dominion Paper Boxes

FOR MILL WALLS

SHERWIN-WILLIAMS



SAVE-LITE

THE PLANT CONDITIONING PAINT

Tendencies

(Continued from Page 75)

The U. S. Post Office Department purchases about 3,000,000 lbs. of jute twine each year.

COTTON VS. PAPER

In 1931, it is reported that there were 375,000,000 cotton bags used for flour; 188,000,000 paper bags used for flour.

In addition to these there are various other commodities distributed in bags, in which paper is making its inroads. The above figures show that paper has taken over 33 1/3 per cent of this use.

In 1931, the records also show: Cotton toweling, 67,000,000 lbs.; paper toweling, 107,043,000 lbs.

Fabrics from flax, hemp and ramie amounted to 36,000,000 lbs., valued at \$23,600,000, and included 61,000,000 handkerchiefs and 37,000,000 towels, napkins and bed clothing.

These statements are not all inclusive and complete. They are only indicative of the external and internal competitive conditions in which the cotton farmer and the cotton manufacturer find themselves.

This octopus gradually tightens its tentacles around both in an ever-menacing and exceedingly dangerous grip.

The question naturally arises, "what can be done about it?"

The answer is not simple and perhaps there is no perfect answer. Only means to improve the conditions can be suggested.

The American Cotton Manufacturers' Association has always felt that an adequate tariff on jute and jute products would clear the fields for the consumption of several hundred thousands of bales of cotton, estimated by many as 1,400,000 bales. This would help employment in industry and increase the consumption of the farmers' raw supply.

The buying and selling of cotton net weight would also improve market conditions and help the farmer more than the mill man. The average Southern farmer is indifferent to both of these suggestions, because, by tradition and environment, he is ultra-conservative and suspicious of any change. If he will carefully read these figures and see what is happening to him and to his best customer, the domestic consumer, he should realize that the foundation of his agricultural security is being attacked and that he must bestir himself to see that it does not happen.

The trade with India and the countries that unload jute and jute products in the United States is of not sufficient value to the South to be disturbed about any retaliations or unfavorable trade balances.

If India should lose all of her trade in jute and jute products with the United States, she would still have a balance of trade in her favor. The Southern cotton farmer and the cotton manufacturer can not sit idly by and wait like Micawber for something to happen. They must get out and make something happen, in order to maintain self-preservation. No word has been said in this article about silk and wool and rayon and the new spun glass and other scientific discoveries that add their weight to the competition that ever increases.

It costs less to operate your carding than any other mill process. Modernize with the grinders card clothing manufacturers use---

ROY GRINDERS

B. S. ROY & SON COMPANY

Worcester, Mass., U. S. A.

Greenville, S. C. : 21 Byrd Blvd.

Cotton Card Grinders, Woolen and Worsted Card Grinders. ¶ Napper Roll Grinders, Calender Roll Grinders. ¶ Shear Grinders.

The

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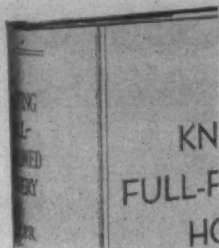
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Change is the law of life. Nothing, man made, remains fixed. New adaptations are always in order.

In addition to the above appeal to the farmer and the manufacturer, there must go the appeal to labor and the public who are so vitally interested in economic factors of life.

The textile industry of the United States is going through the most critical period of its history now. It needs help and not persecution or even indifference. The world is reaching out for some new basis, some new relationships. In the hurry for self-preservation, the means for self-preservation must not be destroyed. Labor and the politicians and the public must not become so obsessed with the theory of the system that they will forget the eternal facts that must obtain if security to self or industry is to become a reality.

The figures in this article are drawn from dependable and reliable sources and should not be lightly or indifferently read. They are indicators which point rather definitely toward a goal at which the cotton farmer, the cotton manufacturer, labor and the public do not want to reach.

Inaction and indifference will lead all inevitably to it. The answer rests with the groups referred to and their attention and action on the problems indicated will determine the future of both the cotton farmer and the cotton manufacturer.

Their fate carries with it the fate of labor and a great social factor in Southern life.

R. E. Benson, Jr., Made Partner in Woodward, Baldwin

R. E. Benson, Jr., has been admitted as a partner into Woodward, Baldwin & Co., New York. This recognition follows two years of service with this organization, one of the pioneers in the selling of Southern cotton textiles.

For the previous 16 years, Mr. Benson had been with Southeastern Cottons, Inc., and its predecessor, the Hunter Company, having been vice-president of each.

Consolidated Textile Corp. Backer

The Mercantile Finance Corp., Ltd., of 435 Yonge street, Toronto, Canada, headed by Jay Kasler, is the organization which proposes to underwrite \$682,700 of new first mortgage bonds in connection with the new or amended plan of reorganization proposed under Section 77-B of the Bankruptcy Act for the Consolidated Textile Corporation, of 88 Worth street. Edward B. Lecy, who represents the Toronto concern, put the name of his client formally into the record at a hearing before Referee Peter B. Olney, Jr.

Accepts Position With Noone Co.

L. L. Watkins has become associated with Wm. R. Noone Company of Boston, Mass., as a salesman and will travel the Southern States as a special representative and service man. This company is engaged in the manufacture of rollers, clearer and slasher cloth. Mr. Watkins was graduated from the Textile School of Clemson College in 1936.

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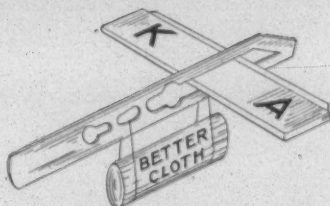
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